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ABSTRACT

Information to orient teaching assistants (TAs) at the University of California (U.C.), Berkeley, to their teaching responsibilities is presented. Written primarily by veteran TAs, pragmatic advice on teaching is offered, drawn from actual classroom experience. After exploring ways to resolve problems that occur in the earliest stage of the semester, suggestions are made on how TAs can devise teaching strategies to improve their effectiveness in all instructional roles, including leading discussion sections in the humanities, sciences, and engineering; teaching composition, math, and foreign language; and teaching lab sections in various subjects. The political, cultural, and social dimensions of being a TA at U.C. Berkeley are also described. Ways to cope with the task of grading and how TAs can evaluate their teaching are also covered. Advice to help TAs teach undergraduates to write effectively is provided, along with information on educational resources and services that can be helpful in teaching and informal advising roles with students. Rights and responsibilities of TAs as educators and employees are also addressed, including the salary schedule, grievance procedure, and tax information. (SW)

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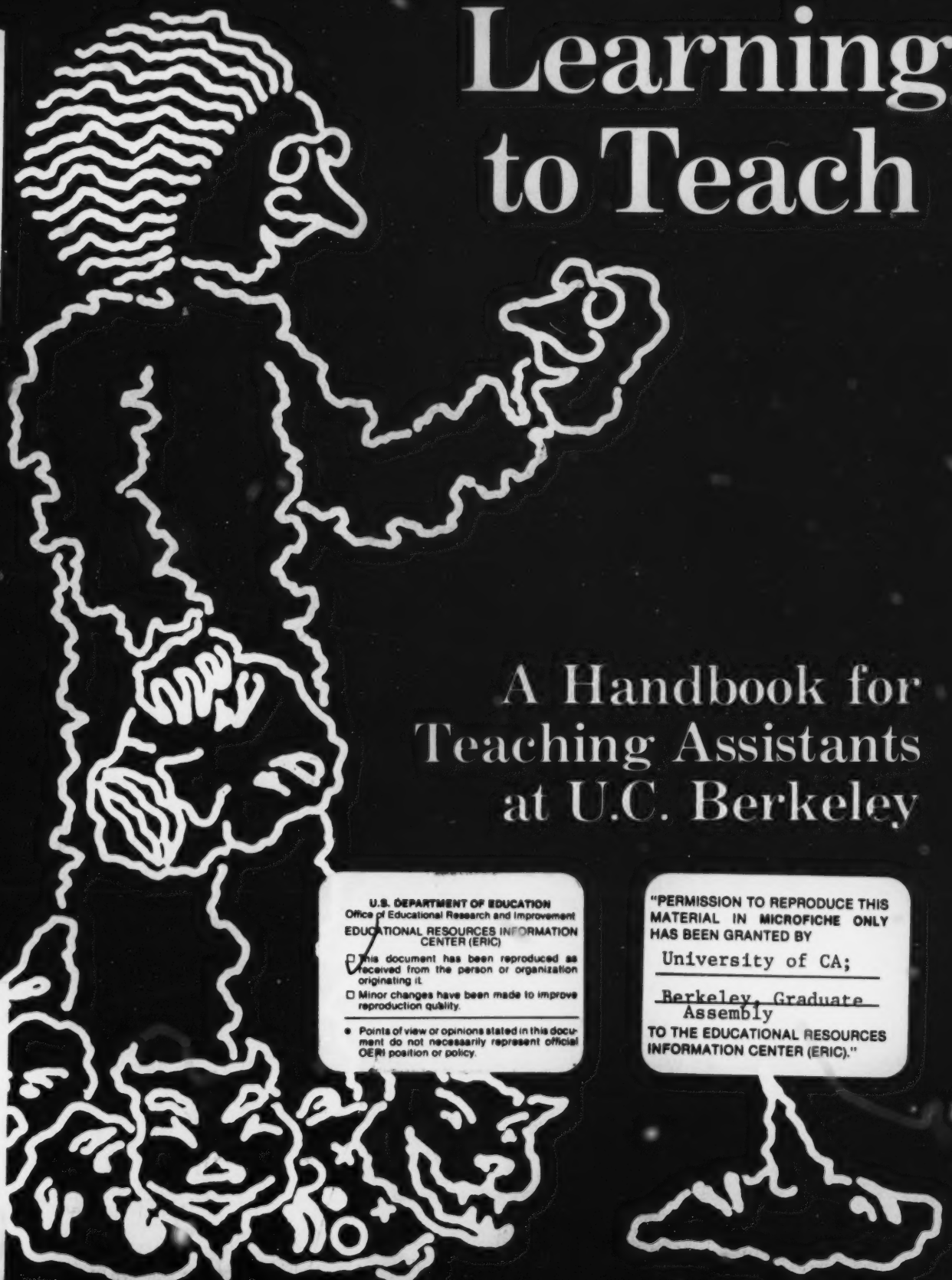
Learning to Teach

A Handbook for Teaching Assistants at U.C. Berkeley



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Learning to Teach:

A Handbook for Teaching Assistants at U.C. Berkeley

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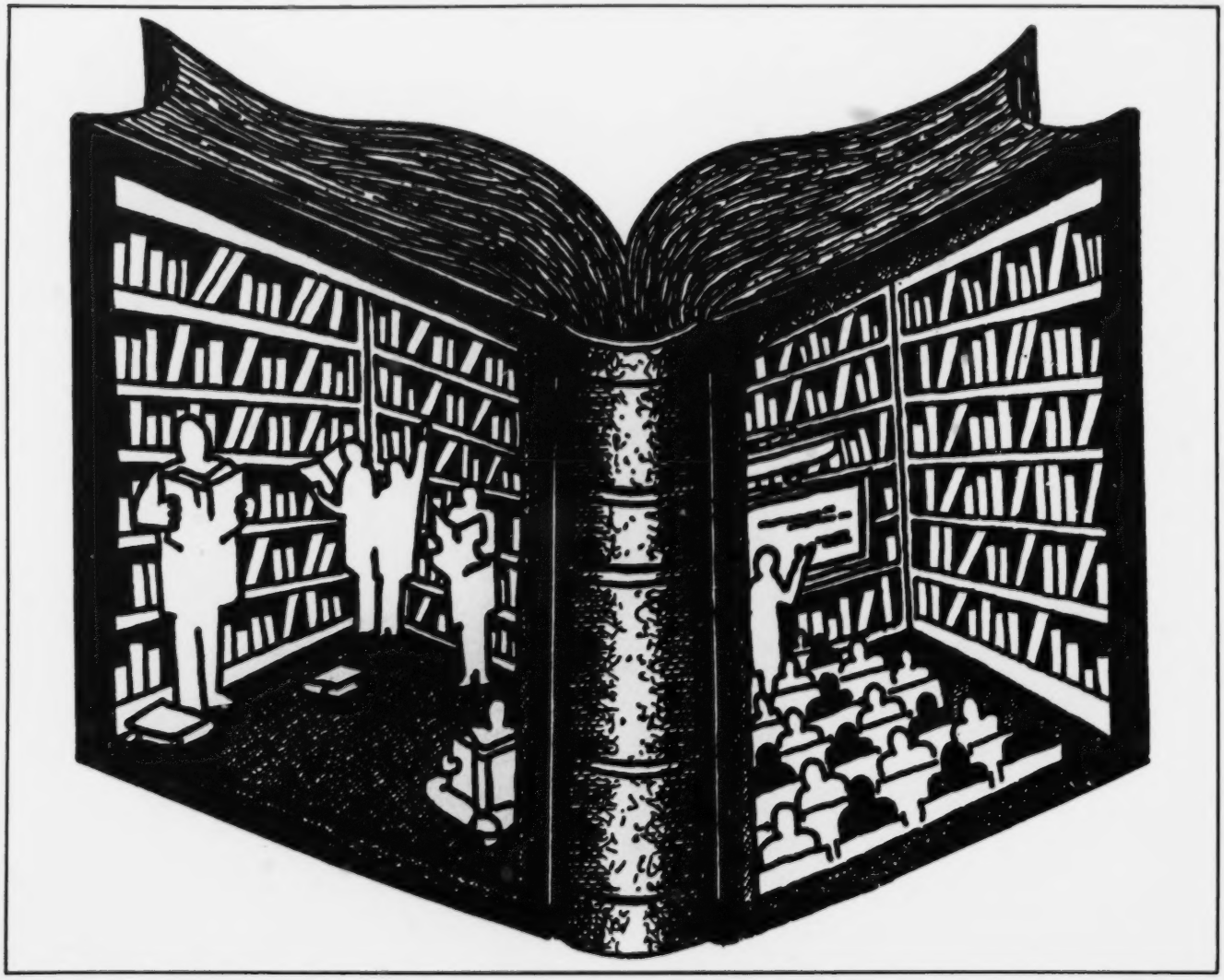
Foreword

Undergraduates at U.C. Berkeley are heavily reliant upon TAs. Because of the massive size of the University, there are simply not enough professors to provide close faculty-student relationships, especially in the lower-division classes. For this reason, TAs are of great importance to the educational life of the University. Graduate students, employed as TAs, are responsible for 58 percent of lower-division class meetings at Berkeley. TAs are often relied upon as advisers by undergraduates on both academic and personal levels. Indeed, William Shack, former Graduate Division Dean, stated that TAs "are the single most important link undergraduates have to the University in their first years at Berkeley."

Thus TAs carry significant educational responsibilities on their shoulders. And for those learning to teach—especially new TAs—the Graduate Assembly is here to help. We are the only student government in the U.C. system that runs a campuswide TA training program. Though our TA Training Project is funded by the University, by administering it ourselves, we are able to provide you with a supportive community of fellow graduate student teachers. This book is designed to orient you to your teaching responsibilities, and through it we welcome you to the ranks of Berkeley's teachers and wish you the best of luck as TAs.

Dora de la Rosa (1985-86)
Sumi Cho (1986-87)
Graduate Assembly Chairs



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Introduction

Without teaching assistants undergraduate education at U.C. Berkeley would grind to a halt. Professors in large lecture courses which dominate lower-division instruction would find themselves burdened with overwhelming teaching loads. They would have to lead dozens of discussion sections per week, grade hundreds of exams, and meet individually in office hours with so many students that they would not have a moment for their own research. A TA-less Berkeley would also be a nightmare for undergraduates, who would confront overcrowded seminars, inaccessible instructors and impersonal lectures. In shouldering a large share of the responsibility for undergraduate education, TAs face an exciting challenge. If they perform well as teachers, they can inspire undergraduates to fulfill their intellectual potential and successfully complete their college careers.

Teaching however, is a complex skill, the mastery of which sometimes eludes even veteran full-time instructors. As relatively inexperienced teachers and half-time employees—expected to progress through their own demanding graduate programs while teaching each semester—TAs often find that they have much to learn about teaching and little time in which to learn it. This handbook is designed to help you adjust quickly and effectively to your duties as instructors. Written primarily by veteran TAs, the handbook offers pragmatic advice on teaching, drawn from actual classroom experience.

The handbook begins with an exploration of ways to resolve problems which occur in the earliest stage of the semester. The second section offers suggestions on how TAs can devise teaching strategies to improve their effectiveness in all the instructional roles they play—from discussion leading to lecturing. Section III describes the political, cultural and social dimensions of TAing at U.C. Berkeley. The fourth part of the handbook shows how to cope with the demanding and potentially painful task of grading. This section also explains how TAs can evaluate their teaching. Although no one expects you to turn every student into an Ernest Hemingway or an Alice Walker, section V should help TAs teach undergraduates to write with clarity and grace. TAs should acquaint themselves with the educational resources and services described in section VII, which can assist them both in their teaching and in the role which they frequently play as informal advisers to their students.

As a TA you have rights as well as repsonsibilities because you are not only an educator, but also an employee. Section VI describes these rights and what you can do to exercise them. You should familiarize yourself with the salary schedule, grievance procedure and tax information published in this part of the handbook, so that if an error or policy violation is made at your expense, you will be equipped to recognize and solve the problem.

Although the contributors to the handbook worked autonomously, came from different academic fields, and in most cases never met each other, their articles reflect a consensus in teaching philosophy, emphasizing the need to break down the hierarchy traditionally associated with the student-teacher relationship, so as to motivate rather than intimidate undergraduates. These authors find that by respecting their students, observing their progress, and listening to their complaints, TAs can learn from undergraduates ways to become better teachers. This same democratic spirit emerges in the TAs' discussion of their work situation, which stresses that the best teaching environment for TAs would be one in which they had a voice in determining the terms and conditions of their employment.

Funding for the handbook has been generously provided by the University's Committee on Graduate Student Instructors. However, this is not an official University publication. The handbook reflects the suggestions, observations and aspirations of TAs; it is an expression of the graduate student community's concern for teaching, and of our desire to make undergraduate education a high priority here at Berkeley.

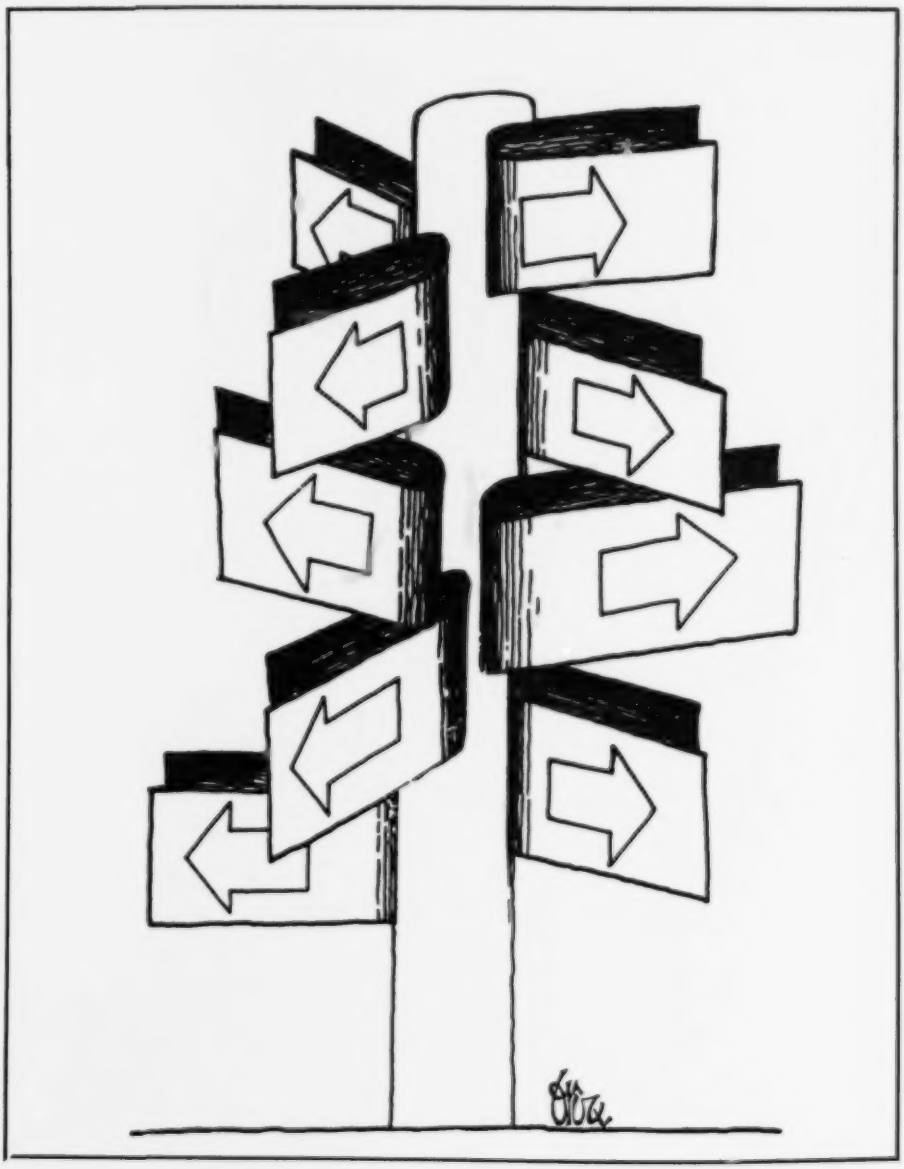
Robby Cohen
Coordinator
Graduate Assembly's TA Training Project

I The TA as Teacher: Initial Concerns

New TAs often find their first few weeks of teaching the most difficult. During this period they must make the major adjustment from student to teacher, and learn to communicate effectively with undergraduates. Although most TAs are extremely well-grounded in their subject areas, their graduate course work does little to prepare them for the pedagogical problems and personal responsibilities which await them as college instructors.

This section of the handbook is designed to help TAs meet these new responsibilities. Here experienced and successful TAs present practical advice on how to cope with the first major tasks confronting TAs. These include preparing strategies for motivating undergraduates and learning how best to use rather than abuse one's authority as a teacher.

Each article in this section addresses a distinct problem confronting the new TA. However, they all emphasize a common theme: that the effective TA will strive from the beginning of the semester to develop a sensitivity to the needs of his or her students. This means that the TA should use those first few class meetings not merely to cover course material, but also to establish a relatively egalitarian, comfortable, and intellectually vibrant classroom environment. The following articles provide a rough blueprint for creating such an environment.



Preparing for Your First Class

The first class is a common source of anxiety for new TAs, and even for those with experience. In addition to worrying about confusing and sometimes unsavory administrative matters—like turning desperate students away from an already overenrolled section—TAs fret about a host of potential problems that can easily be avoided with proper preparation. Below you will find instructions on class preparation which should help make your first section a smashing success. Remember, a well-prepared TA is a confident TA—at least most of the time.

Be prepared.

Before your first class session try to meet with your supervising professor. The professor should brief you on the course's content. It is best if such an orientation meeting is planned well in advance of the first class and if it involves all the course's TAs, so that everyone is clear on their responsibilities and can prepare properly for the semester. If your professor has not set up such a meeting, you should feel free to request one. If the professor is unable to conduct this orientation session, TAs can still help each other prepare for the course by holding their own meeting in which veteran TAs explain to their less experienced colleagues what to expect in teaching the course.

Topics which should be discussed at the orientation meeting include:

- What should take place in the discussion or lab sections and how section meetings can best be integrated with the lectures.
- What responsibilities you will have for student evaluation and grading.
- How much freedom you will have to present materials not specifically addressed in the lectures or to experiment with the section format.
- How many office hours you are expected to hold during the week. Find out the location of office space for TAs.
- Whether there have been any particular difficulties with the course in previous years.
- Whether the professor plans to meet with the TAs during the semester to discuss both the progress of the course and any problems the TAs may be having in their sections.
- How to obtain required course readings. In many classes TAs should be provided with free copies of the assigned books. Find out if and when these will be available. It is also critical that you find out what the professor has done to make the required books available to undergraduates either for purchase in local bookstores or for borrowing on reserve in a campus library. The professor or the TAs should check to see that the books are going to be arriving at the bookstore as scheduled. Late book arrivals can create havoc in sections (since they leave the students unprepared), unless the TA and the professor are aware of the problem and rearrange the assigned reading schedule.
- Whether a course description and syllabus have been prepared. If the professor has done so (as most do), be certain to bring enough to the first class to give to every student. The syllabus should summarize the course's content and format, specify session-by-session reading assignments, and indicate how students will be evaluated. It is best if deadline dates and other course requirements are detailed in the syllabus. It should also specify the number of absences permissible. Be sure the syllabus indicates in which libraries and bookstores the course readings are available. This kind of information, especially if presented in writing, will prevent misunderstandings and allow students to plan their study schedules more effectively.
- The maximum number of students your

supervising professor wants admitted into class sections and what procedure should be followed if your attendance exceeds that maximum.

In preparing for the first class, try to read the articles, chapters, or books required for the earliest part of the course. This will enable you to give your students an accurate idea of what academic delights await them. Don't overprepare for the first class, however, by blitzing through the entire semester's reading; if you do you are likely to overwhelm your students and exhaust yourself.

To ensure that they are well organized at the first class, some TAs find it helpful to bring an outline or list of the key points to be covered in the meeting. Such written preparatory materials can serve as useful teaching tools. But the TA should not be overly reliant upon outlines or allow them to dictate a rigid orderliness which may inhibit dialogue, spontaneity, and a free exchange of ideas. Remember, some of the greatest insights in class grow out of unplanned and unexpected discussion.

—Robby Cohen

Conducting Your First Class

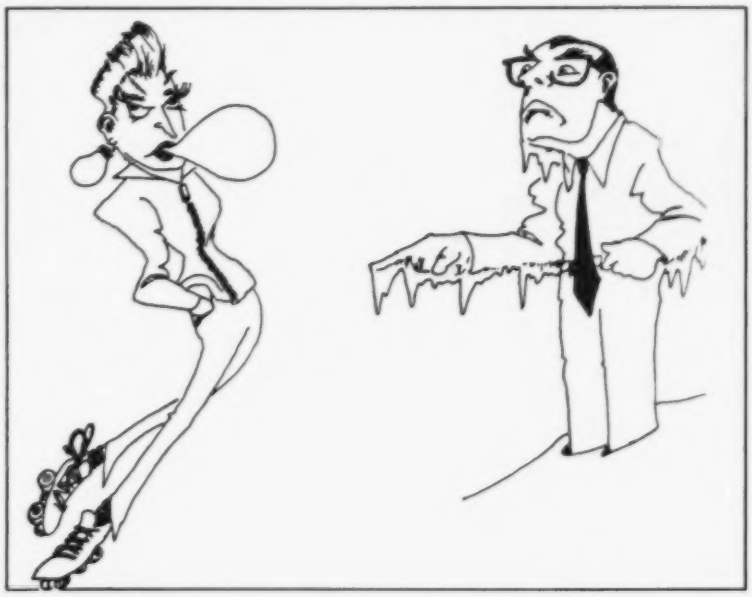
There is no "best" way to conduct your first class. What goes on in section or lab on the first day may differ among courses and even among TAs in the same course: some TAs prefer not to discuss class materials during the first section but instead focus more attention on creating an open class atmosphere; others may have no choice because they are required to cover specific material in the first section. A TA teaching early in the first week may well find that enrollment is too ill-defined and students have not had enough time to prepare for a serious discussion of the first assignment. Others teaching late in the first week may find that students have had sufficient time to complete the assigned readings and are prepared for such a discussion. TAs planning their first classes should be aware of the different possible scenarios they may face in the first week and consider the following comments in light of whatever their own peculiar circumstances may be.

The First Class

"The morning before the first class I ever taught, I was so nervous I could barely talk" said one veteran TA rather sheepishly. "But as soon as I entered the classroom and saw the students, whom I suddenly realized were actual *people*, and most of them just as nervous as I, my nervousness vanished."

A case of the pre-class jitters is an experience shared by most first-time TAs. Some TAs say that careful preparation helps ease apprehension, and others stress that discussing teaching methods with more experienced colleagues before the first class calms them down.

One sure-fire way to cure nervousness during the dreaded first session is simply to start the class discussion. "It's only the *idea* of starting to teach that makes you nervous," said one TA. "Before my first section I was incredibly nervous and paced the hall for a while. As soon as I started the class, however, I was fine." Another TA suggested getting to the classroom early and chatting with students before class formally begins. This helps acquaint the TA with the students; it also ensures that the TA does not walk late into a classroom overflowing with anonymous faces.



First impressions make all the difference.

Creating a Positive Class Atmosphere

An informal and honest approach on the first day is important not only for easing your own apprehension, but also for setting the tone for the entire semester. First impressions are as important in the classroom as they are everywhere else. If you can start off the semester by letting your students see that you are a human

being subject to the whims of mood and confidence just like them, you will have a head start toward establishing personal rapport that will reward you the rest of the semester with honest and active student participation. On the first day, students are most concerned with the basic aspects of the course. They want to find out what books they will be reading and about grading policy and exams. Said one TA, "It sounds incredible, but at a highly competitive school like Berkeley, these students want to know on the first day what the final exam will be like." Students are often "shopping around" during the first week; many of them need to know how much work is expected of them in your class before they decide whether to enroll.

Be responsive to student concerns. Hand out a syllabus and a reading list. Talk about grades. Advise them on where you grade hard and where you will bend a little. Let them know about the nature and frequency of exams and papers. Tell them whether you will take class participation into consideration when grading and whether you grade on improvement. Most important, let them know that you are concerned about their education and well-being by eliciting their questions and responding to them openly and candidly.

First Class Discussion

Sometimes it may not be best to jump right into the meat of the course on the first day. Even if the course covers a lot of material, with 15 weeks of instruction you can afford to "go lightly" in the first session meeting. If you run through a lot of course material on the first day, then interested students who may have missed your first section because they were auditing another will be discouraged from taking your class because they will already feel behind. Here is a checklist of teaching hints for your first class:

- Introduce yourself, then hand out a syllabus and reading list and go over them, answering any questions. Talk about grading; what counts most, what counts least and how tough you are going to be on deadlines. Talk about office hours, when and where you will be available for help.
- Once everybody's questions are answered, start at one end of the room and go around having everyone introduce him or herself. Besides the usual name-major-year, try asking students to say where they are from ("It always gets a response from other students," one TA noted, "and is a way to get them talking to each other on the first day.").
- If you are bad with names (a common shortcoming) then you may want to have each student put his or her vital information on a 3x5 card which you then refer to until you learn everyone's name. During the first few sections, some TAs find it useful to have students state their names before they make a comment in class; others actually have students write their names on pieces of folded paper and put the paper in front of them so that the TA and the other students can learn everyone's name quickly.
- You can foster a good relationship with your students by letting them know that a short time ago you were sitting where they are now. You might then introduce an interesting example of the course material to illustrate the kinds of things they can expect in section.
- Try to cover some substantive intellectual material during the first class. Many TAs feel it is important to get beyond mundane administrative details and at least briefly discuss some exciting problems or issues germane to the course. This will immediately get students engaged in the material and speaking to each other about it. Some TAs bring in copies of a very brief article or document that will provide a basis for discussion. Others like to devote their first section to a general introduction of and discussion about the nature of the course and of the academic discipline in general: What is sociology? Why study economics? What is historical methodology? etc.
- It is vital that you include as many students as possible in class discussion so that all students from the very first day will feel comfortable speaking in front of the class. Get them talking to each other.
- To help facilitate discussion you can break the class into smaller groups. This allows students to get to know their classmates; small groups also help shy students since it is usually less intimidating to speak in this setting than to address the entire class.

Adopting Realistic Expectations

New TAs should not expect too much out of their first classes. Just as it is difficult to induce strangers to speak to each other in social settings, TAs may find it hard to provoke lively discussions in the first section. Remember, too, that many students may not be as interested as you in making your first section an exciting educational experience; they may have other concerns on their minds—like whether your reading list is too heavy to be compatible with the other work they have to do this semester. Give yourself and your students at least a few weeks before you jump to any conclusions about the quality of the discussion or the success of the course.

—David Pickell

Motivating Your Students

The ability to motivate students is one of the most important skills in effective teaching. If students are excited by both the course content and by the process of learning, then your instructional work will be a gratifying experience. All instructors should carefully consider ways to encourage students to take an active role in their own educational development.

Perhaps the most important means of maintaining an open and vivacious classroom atmosphere is positive reinforcement. When students answer your questions correctly, praise them. This encourages them to continue participating actively in section or lab. When you are summing up information presented in section, try to refer by name to the students who made good comments in class—e.g. "As Joe pointed out . . ." or "As Jane contended . . ." Do not embarrass students who volunteer incorrect answers to your questions during section. Try as diplomatically as possible to show that the student's error is not totally unreasonable, that it is a good guess, but that it isn't right.

Grading and Motivation

TAs should also be aware that grading policies may affect the motivation of students in section. Find out first the grading policy of the professor in charge and determine just how much autonomy you will have in assigning grades. If it does not conflict with the professor's policy, then you might want to figure attendance and class participation into the final grade; this helps promote class discussion. You might also consider grading on improvement. This may help prevent students who do poorly on the first class assignments from getting despondent and giving up on the class. Stress that poor grades on certain (or all) of the class exercises are not necessarily a reflection on the student's personal worth or intelligence. Emphasize that grades are not a measure of innate intelligence but simply a gauge of their educational progress. Let them know that with hard work there is always room for improvement. Strive to convince students to divorce their egos from their grades. Stress also, in cases where it is appropriate, that even though the student ended with a grade of, say, B-, this may actually be a sign of substantial improvement if this student began the class getting grades in the D range. There is light at the end of the tunnel.

Some TAs also find it useful, especially in cases of poor grades on papers, to assign split grades. Suppose a student receives a D+ on a paper. To help avoid demoralizing the student, you might consider indicating that it actually received, say, a B- for content but an F for expression or style. This distinction is in some measure specious, since content and expression are usually inseparably bound, but it may give struggling students some encouragement.

Tell even your best students that there is still room for improvement. An A grade is simply a means of comparing their work to that of other students in the section; it does not mean that they have perfected their writing. Even an A paper may be improved upon. Convince them to strive for excellence and self-improvement.

Relevance and Enthusiasm

Students in the class are not likely to be motivated if the TA in charge does not display enthusiasm for the material being presented. Try to be interested in the discussions; make efforts to ensure that the questions you ask will elicit interesting discussion. One way of doing this is by making class dialogue relevant to the individual interests of the students. That is, it may be quite difficult to get students excited about a discussion of, say, the 14th Amendment during Reconstruction; but if you relate it to contemporary issues of relevance to them today —like affirmative action—then the discussion is much more likely to draw in everyone. You might also make the discussion more relevant to your students by learning early in the semester what their particular majors or interests are. When questions or problems relating to a certain individual's interests arise, call on that individual; ask if she or he can offer an insight. This will help make students feel that their thoughts matter and are valuable; it will also help ensure that the subject matter seems

A good TA can bring a subject to life.

relevant to them.

Another means of making section an interesting and enjoyable experience for both the students and the TA is to employ novel teaching strategies occasionally. You might consider using audio-visual aids, newspaper clippings, or music to liven up class.

When All Else Fails

TAs should also realize that it is not always possible to motivate all students. Sometimes almost no means of positive stimulation will help motivate a class. Many TAs have had the following experience: one section is wonderful; every question asked by the TA is a springboard for a very lively and sophisticated discussion; but when the same TA asks the same questions at his or her next section, the students sit there with blank looks on their faces. The TA tries to re-evaluate his or her teaching methods and adapt to this particular class, but fails. Indeed, all efforts to deal positively with the problem fail. The only recourse is some type of negative reinforcement.

There are many possible explanations for why class discussions don't go well. Sections or labs early in the morning or late in the afternoon tend to drag, as do those held in dingy basement rooms without windows or ventilation. Seating arrangements may also affect discussion; generally it is better to have movable seats or a seminar table around which the students may sit. Students facing each other are more inclined to speak to each other. Sections or labs held early in the week (especially those on Monday) tend to be quieter than those held later in the week. TAs may anticipate these problems and remedy them by asking for better rooms and class times.

But even under the best of circumstances, TAs sometimes confront reticent classes. One possible explanation for continued silence is that the students are simply not coming to class prepared. Call on students by name. If they pass or do not know the answers to your questions, you might consider either conducting a short in-class quiz the next week or assigning a short paper on the next week's readings to be handed in at the beginning of next section. You can also prod your students to participate in class by asking them to give oral reports or lead section discussions. This might prompt them to come to class prepared.

Perhaps the students are coming to class prepared but still refuse to engage in class discussion. If applicable in your course, remind the students that class participation counts in the final grade. One veteran TA related the following experience:

"One of the first classes I ever taught was extraordinarily quiet. Getting them to make a peep was like pulling teeth. After weeks of frustrating sections I finally just leveled with them. I told them that I was sorry that section was going so badly and that my other section was going very well. I reminded them that it was their education and that they should take an active role in it. Then I asked them to write critiques of section. In these critiques I asked them to answer two questions: What should I do to make the section work better? What should they do to make it work? The responses I received were very helpful. Many students confessed that they felt guilty about not participating in discussions. They appreciated my honesty in admitting my frustration with class discussions. I implemented a number of their suggestions. Class discussions improved substantially thereafter."

There is only so much a TA can do to try to make section lively. Sometimes even the most conscientious TA will find the classroom silence impermeable. In such instances it is important to continue trying to stimulate discussion; but it is even more important not to place all the blame on yourself.

—Greg Schultz

Blackboard Use

How many times have you looked up in class after being distracted or after losing the main thread of the lesson only to be greeted by a meaningless, randomly distributed set of symbols or facts on the blackboard? How often, after getting home, have you found your notes so meaningless that it is not even clear what subject was discussed? Even more perplexing is that the lecture might have been beautifully organized. Many students' notes are an exact copy of what appeared on the blackboard, with few additional qualifiers, explanations, etc. If you are skeptical, ask to see your students' notes right after class. You will be amazed that many will not differ in even a single word. If you keep this in mind, you are on your way to more effective blackboard use.

When you do a problem at the board, students see not only a solution, but also how you organize a solution. Effective boardwork highlights this

organization and provides the student with a valuable model for writing and for doing problems. The end result of the board work accompanying a unit of the lesson should be an *outline* of what transpired. If you are solving a problem, an outline of the problem should remain at the end. The hypotheses, main points, and conclusions should be isolated, boxed off, or otherwise emphasized. Even the best students will occasionally lose the thread of a lesson or forget the original objective of a discussion. The blackboard is their major and often their only resource for recapturing the lesson.

Structure Your Boardwork

- Use headings. Each unit of board work should start with a description of what follows. For example, when putting theorems, conjectures, examples, etc. on the board, identify them as such in writing. This is an invaluable aid to students in putting their notes in perspective and providing better sets of notes for study.
- Isolate and identify the basic components of what you put on the board. Use words like *theorem, proof, answer, example.* This practice, in addition to generating better notes, reinforces and emphasizes the structural aspects of problem solving.
- Use underlining, capitals, and boxes to emphasize key statements, ideas, and formulas.
- When doing a problem at the board, write a complete statement of the problem or give a clear reference. Define each of the variables you use in writing.

If you follow these suggestions you should find it natural and easy to summarize what you have done when your are finished.

Have a Board Plan

- Try to organize your board work so that when the boards are full you can erase the computations and details and leave the essential ideas.
- Be selective. Write down the basic principles. Writing down everything usually obfuscates rather than clarifies what you are doing. If you do omit an important detail or computation, write that you have done so ("computation omitted" will suffice). This can save a good deal of grief.

Sometimes it is best to reserve one blackboard panel for the main points or outline and do the details and computations sequentially on the others. This is a particularly good system when you wish to summarize and helps keep the details of a topic or problem in perspective.

Additional Tips

- If you have a classroom with three movable boards, use the middle board first. Push it up and use the front board next. This allows the information to stay up the longest.
- Don't work with eraser in hand. Teachers who simplify expressions as they go along by erasing are anathema to students trying to take notes. Put a single line through expressions you wish to simplify and write new expressions above.
- Determine the visible board area. Ask students in the back how far down and those in the front how far up they can see comfortably.

A messy blackboard can disorient your students.

Office Hours

During the first week of the semester, you should tell your students the location of your office and the times during which you will be available for consultation. You might also post these hours on your office door. It is advisable as well to announce any change in your office hours or any emergency cancellation. Most TAs spend between two and four hours a week conducting official office hours. You should ask the instructor in charge what is expected of you.

Office hours can be an important part of the learning process or a completely wasted opportunity. The difference depends on your ability to encourage students to come to your office to

clarify material presented in class, ask questions about assignments, or get suggestions for further readings. Early in the semester you can encourage the habit of using office hours by scheduling a short interview with each student in your section. In this interview you can find out the reasons they are taking the course, any particular problems they anticipate, and generally develop rapport.

Only office hours can make a TA less remote.

Address Individual Problems

As the semester progresses and you become more familiar with your students, office hours can be used with increasing effectiveness to address individual learning problems. For instance, almost every semester you will teach a few shy students who consistently do well on written assignments but who are initially reticent in class discussions. In office hours you can meet individually with these students and encourage them to speak more in class by expressing your enthusiasm for their work and urging them to share their good ideas with the rest of the section.

In addition to advising and answering questions from individual students, office hours can also be used in a number of ways to supplement lectures and discussion sections. For example, special office hours can be scheduled to deal with particularly difficult material. Any student needing more work on that material can report to the section review. Group office hours can also be held for review sessions at the end of the semester.

Fairness and Respect

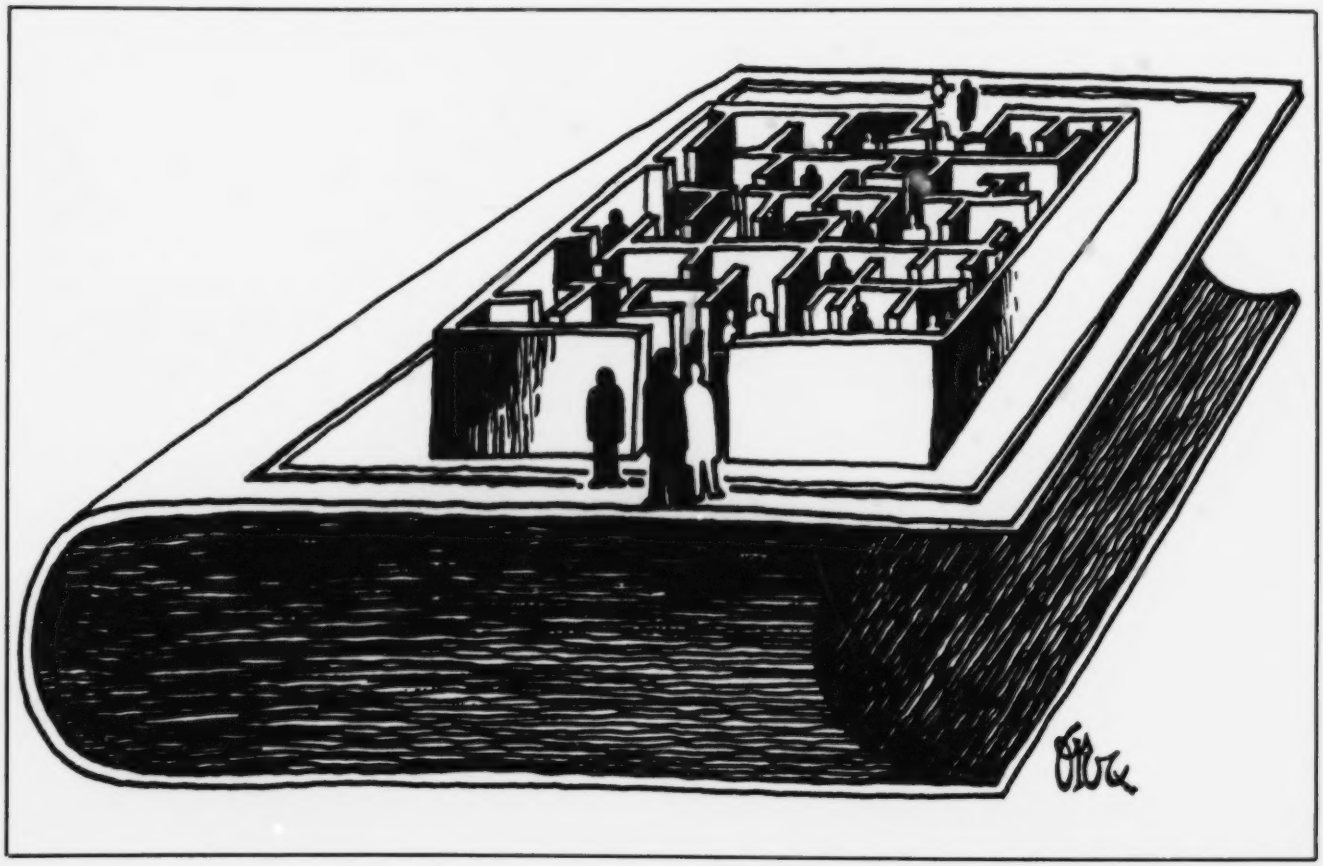
In meeting with students during the semester, aim at creating the sense that you will treat them fairly and without favoritism. If you are approached by a student with serious personal problems, refer the student to the appropriate counseling facility. Despite your desire to help students, don't allow yourself to be put in the position of surrogate parent or psychotherapist. The creation of a dependency relationship could be harmful to you and the student.

Students may be critical of a course or faculty member but feel uncomfortable about voicing their criticism directly to the professor involved. You may want to convey the criticism yourself, particularly if the criticism is constructive and can be used to improve the course. If you do decide to convey any critical comments, make sure you protect the student's anonymity. As a TA you are in an especially difficult and sensitive position and should respect the confidences of both faculty and students.

II Teaching Strategies

Throughout the semester TAs search for ways to induce their students to think critically and creatively and to participate in the learning process. But TAs find that at least a few of their students prove unable to devote their heart and soul to their courses because they are too preoccupied with the LSAT, the Sex Pistols, or some other pressing outside interest. TAs should try, then, not to be unrealistic in formulating the criteria by which they judge the effectiveness of their teaching. It is okay if only half of your students become so inspired by you that they decide to devote their life's work to your field.

Although TAs cannot expect to reach all their students, there is much that they can do to heighten undergraduate enthusiasm for the class. This section provides suggestions as to how the quality of TA instruction can be improved through the use of coherent teaching strategies. It analyzes the specific problems facing TAs in disciplines as diverse as the sciences, humanities, and social sciences, and provides some department-specific suggestions about useful teaching techniques. Though the authors of these articles differ in particular teaching strategies and in their fields of expertise, they share a marked enthusiasm about teaching. These instructors suggest that effective teaching is not some elusive art, but is rather the natural outgrowth of conscientious preparation, experimentation with teaching methods, and a willingness to engage in a continuous process of self-evaluation and improvement.

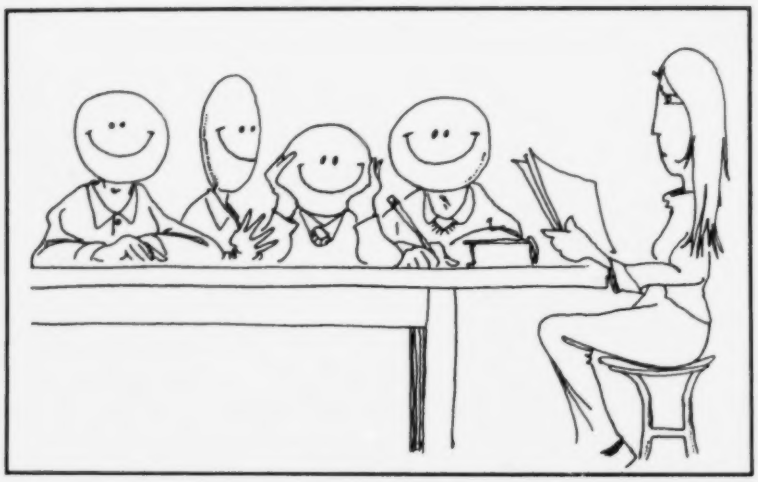


General Tips on Discussion Sections

Virtually every TA at Berkeley is responsible at one time or another for planning and conducting some type of discussion section. Stimulating good discussions in which you moderate but do not dominate can be difficult. Even Socrates found himself asking questions to which he received only the reply "Yes, Socrates." So be patient with your students and with yourself.

Types of Discussion Sections

In general there are two types of discussion sections at the University, each requiring significantly different approaches, although they overlap in some respects. Discussion sections can be categorized on the basis of whether the TA is completely responsible for introducing new material to students, or largely responsible for reviewing, clarifying, and elaborating on material already introduced by the instructor in lecture. TAs have complete responsibility for classroom teaching, during at least part of the semester, in the introductory language and composition courses (English, Rhetoric, Comparative Literature, etc.). They act in the second capacity more often in large introductory social, physical, and biological science courses. Both kinds of TAs must encourage learning through discussion, but the TA in the sciences must be concerned first about integrating discussions with the lectures.



Every TA's nightmare is a discussion section filled with very agreeable people.

Integrating Discussion Sections with Lectures

A TA who doesn't attend or doesn't follow closely the instructor's lectures will be in no position to conduct a discussion section which in at least some respects derives from them. Generally it is crucial that you make an effort to attend all lectures and follow them as carefully as you can with an eye toward identifying areas that may give your students difficulty. On some occasions, of course, you may be confused yourself; whenever possible, try to clear up these areas of difficulty before you meet with your section. Regular informal meetings among TAs in a course can be particularly useful in solidifying everyone's understanding of the course material.

The same advice holds for the course texts: unless you read them carefully you will be unable to answer questions or clear up specific confusions that they may create. Familiarity with what a text covers is no substitute for familiarity with how it covers it.

The Section and the Student

It will be your task to convince students that the discussion section is a useful and necessary part of the course. Some will think otherwise and feel that they have fulfilled their obligation by attending the lectures. Try to allow enough flexibility so that your section will appeal to most of your students' needs. If most need lecture clarification and review, you may lose the more advanced students—but their concerns can be dealt with during office hours. However, if most are ready for application and extension of lecture material, you should consider addressing your sections to these students, again using office hours to work individually with students who have more fundamental problems. There are many ways in which you can become aware of your students' level of understanding—class discussion and questioning, informal discussions before and after class, testing, etc. When students realize that you want to conduct a section that will meet their particular needs, attendance and class participation are more likely.

Economics TA Dave Terkla gives his approach to these problems:

> *There are several controls which should influence the way in which you present material in a discussion section, as well as the content and amount of material you present: 1) the quality of the lecture given by the professor, 2) the liveliness of the particular section, 3) the structure of the course, especially the quantity of material to be covered, and 4) the difficulty of the text.*
>
> *The more effective the instructor is in getting major concepts across, the more flexibility you will have in planning sections. If the students cannot grasp key*

points because of a poor lecture, you, as TA, may feel obligated to present these concepts to the students again. Economics courses, for example, are usually overloaded with material, and TAs find the students extremely uninterested in seeing new material presented, even though it may be particularly interesting to the TA. Presenting policy applications of the study material makes for a considerably more successful section, especially if the topic under consideration directly affects students (e.g., rent control). You will never find a lack of current, relevant issues by which to stimulate great discussions.

If a section is composed of students taking the course for a requirement, with little interest in the material, discussions may be a particular problem. Even in these sections, however, there is often a small core of responsive students. You will probably find in a situation like this the most effective course of action is to rehash the lectures and readings while putting your own slant on material.

The main point is that the more time spent thinking about and preparing for a discussion section the more successful it is likely to be. A safe rule is to remember that you are a student also—How would you react to what you are saying? Would you understand it? Are you making sense to yourself? If not, you can't expect to have very successful discussion sections.

Preparing a Discussion Section

Excessively rigorous pre-structuring of discussion often inhibits successful teaching. If you have a lecture in mind, you'll be likely to give it the moment you ask a question which doesn't get immediately answered.

But if rigid preparation is usually unsuccessful because it works against student involvement, no preparation is also foolhardy because it works against student learning. Familiarity with the material, a general sense of what needs to be learned or accomplished in a discussion, some specific questions designed to spur students' thoughts toward this goal, and a willingness to let discussions take an occasional unexpected turn will help to create an atmosphere in which learning can take place.

Class Atmosphere

Establishing a classroom atmosphere in which students are comfortable and want to learn is important. You can help do this in a number of ways: by being enthusiastic about the subject matter you teach; by learning students' names (and having them learn each other's); by treating their ideas (and them) with respect; by becoming a careful listener. The atmosphere you create can decrease the sense of competitiveness that often prevails among students and inhibits shyer students from participating.

Classroom size and arrangement can also be important. Whenever possible, try to arrange the class so that everyone sees everyone else. Arranging the class in a circle or around a table draws shyer students out and makes you a less intimidating figure. To encourage class participation it is also very important to use positive reinforcement whenever students say something good and to try to avoid embarrassing a student who says something incorrect.

Asking Questions

Despite the fact that a good discussion may seem to conduct itself, there are a number of practical decisions a TA has to make regarding questioning technique. Which ones to begin with? How simple or complex? Directed to whom? Answered by whom? What if they aren't answered? What to do with incorrect or partial answers? Which is more important: eliciting specific answers or stimulating general intellectual inquiry? What follows are a number of suggestions about ways to answer these questions.

- Decide whether you are more interested in eliciting certain answers or in stimulating general intellectual inquiry. This decision, largely dependent on your particular discipline, will greatly affect the content of your discussion and your own flexibility in letting them take their own shape.
- Even if you decide you want a general intellectual inquiry, it is usually best to begin by discussing basic questions. Initial questions should be simple, designed to test students' understanding of the lecture or the readings. Probing for specific areas of understanding or misunderstanding is a necessary first step in most discussion sections. Once this basic understanding is achieved, you can move on to ask questions about larger units of material, about relationships among the different parts of the material and their relationship to the whole, about applications and expansion of the material into new areas.
- Allow time after asking a question for students to think about it and to formulate an answer. These periods of silence may be uncomfortable and new to some students (and to you); letting them know at the beginning of the semester that you plan to do this can eliminate the strain. Questions should not be repeated or rephrased too

quickly, especially when they provide too direct a hint.

- Make an attempt to avoid repeatedly calling on the first student ready to reply; slower or shyer students deserve the chance to participate. Consider establishing a pattern of asking questions of individual students, with their right to "pass" without fear of embarrassment. Students often provide excellent responses to direct questions which they would never have answered otherwise. Reticent but prepared students often appreciate TAs who include them in a discussion by directly asking them questions.
- Be supportive of students. If an answer is completely incorrect, encourage the same student to rephrase or to attempt it again. Try to provide an atmosphere in which students feel comfortable offering tentative or partial answers, and encourage them in their attempts to elaborate or qualify. If one student needs assistance in completing an answer, look to another student to provide it, rather than providing it yourself.

Increasing Class Participation

There are many other techniques you can employ to encourage active class participation:

- Provide study questions about the lecture or reading material which can form the basis of the next class discussion and will alert students to the most important ideas to be derived from that week's assignment.
- Require students to hand in one page summaries of that week's readings or class assignment. This will help ensure that they do the reading before they come to class. You might also encourage them to hand in a question or problem at the end of section which can be taken up at the next meeting. (Five minutes may be set aside for this purpose.) This allows shyer students a means of making their areas of difficulty known to you. It also allows you to diagnose major areas of difficulty when similar problems are raised by a number of students.
- Ask small groups of students to be responsible for planning and leading some discussions. This works best when students are responsible for a limited topic, problem, or research area.
- Break up the class into smaller groups, each of which is responsible for developing an idea, working out an argument for a position, considering a possible answer to a study question or a paper topic. Move from group to group offering encouragement and providing suggestions without offering them answers to the questions they are supposed to be answering. Reassemble the class to report results.
- Ask students to use the blackboard to solve problems, do translations or prose composition work, or to list ideas or possible answers to a question.
- Create, or at least provide, a catalyst for a disagreement among students over possible concerns or ideas relevant to the course. Encourage students to point to information drawn from the readings and lectures in support of their positions, rather than to rely on emotional appeals.
- Play "devil's advocate" if necessary to prompt students to get involved in or animated about class discussion. Even if you agree with students' arguments about a certain topic, challenge them with the most cogent argument against their position. This often makes for good debate in class.

Discussion Sections in the Humanities

As graduate students, we come to think of participating in seminars as a natural and common experience. Analyzing and discussing difficult material or challenging a professor's opinion have in many ways become second nature. Not so for your students. Many of them have never been in a discussion where they have been asked to contribute their own opinions, much less challenge the authority of the text or instructor. Many feel intimidated and confused. They are facing new material, possibly an entirely new discipline. Although many of your students may have had social science or humanities courses in high school, they will be astonished to find out that you don't presume to have all the answers, that behind the text lie bitter theoretical controversies, and that even the facts may be in dispute. You as the instructor become responsible not only for teaching the course material, but for the process of the discipline itself.

Planning and Setting Goals for the Class

Good teaching is not the same as good

scholarship. Undergraduates have different needs and expectations than graduate students. I consider it my responsibility not to teach them to be historians exactly, but to be excited by history, and to learn to think out historical problems in a way that can be useful to them. This means that I spend a good deal of time before the first class trying to figure out what I expect of the students, what I hope they will get out of the section, how much participation I can encourage, how much authority I want to share, and how to go about creating an atmosphere of learning. Knowing this, it is much easier to convey my objective to the students. Not all problems and issues can be anticipated, but by having a clear set of goals and priorities at the outset, these problems will be more easily resolved.

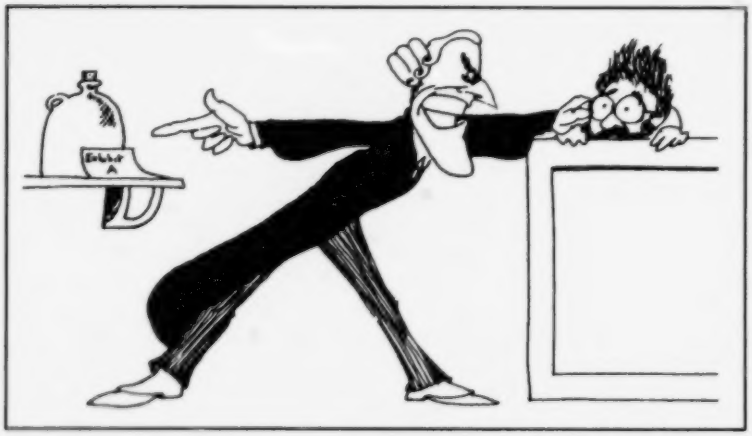
One of my overall goals, for example, has been to see that students leave my class with the ability to write an analytical essay. I found the section a good place to help students develop the necessary skills. When it became clear that my students had difficulty getting out a thesis statement, much less pages of argument, I had them outline several articles, picking out the thesis and the author's supporting evidence. I also asked them to note briefly the weaknesses in the argument or evidence that disturbed them. I then made this assignment the basis of the next week's class discussion.

Using Small Group Discussions

I divided the students into three or four groups, depending on the number of articles, and had each group discuss the article in order to present a clear defense of the author's position to the whole class. They also had to be prepared to defend their article and to decide on what historical grounds the articles should be judged. The results were very positive: the students were thoroughly prepared for section; they could identify arguments with confidence and share their ideas with their peers. Moreover, their writing improved noticeably. When the students understood how an argument was constructed they had a much easier time developing their own.

While I have no set formula for leading a discussion section, I usually rely quite heavily on the use of what I call "problem solving groups." The possibilities for small group topics are infinite, ranging from the narrow and straightforward to the ambiguous and general. Whatever kind of approach you take, the small group invites students to participate actively. Sometimes I break them into groups based on a prior assignment as I explained above. Usually, however, I try to come up with a way to draw on the reading and lecture material by asking a controversial question that will force them to grapple with new concepts. Other times I present an idea that asks them to link lectures and readings with larger issues.

During a week in which we dealt with immigration and political bossism in the Gilded Age, I gave each group an identity. One group represented the political bosses, another group spoke for the Mugwump reformers, while a third consisted of newly arrived immigrants and working-class poor. While the members of each group had to work with the same problem: "Resolved: Machine politics do not serve the democratic interest," they also had to decide which position they would take and then figure out their debating strategy in relation to the other groups. After the positions had been presented they had several minutes to caucus before giving a rebuttal. The exercise encouraged them to take positions they might not have considered on their own. It helped them to develop an argument that reflected the social, economic, and political positions of groups based on specific historical circumstances. At the end, the students had achieved a better understanding of machine politics and wanted to develop and discuss their own interpretations.



Some TAs prefer the adversarial approach.

Asking Questions

Another technique I found successful was a question-and-answer format that involved three levels of questioning. In a discussion about Betty Friedan's *The Feminine Mystique*, I first asked basic informational questions to clarify material in the reading. I then moved to a more complex level of questioning where we discussed students' opinions of the book. In addition, I asked them if it remained an important book, if it should be seen as a primary document, or if we might consider it a historical work. Then I moved the discussion to a more

personal level and asked them if they faced any of these issues in their own lives. We began discussing sexism, parenting, careers, and social and gender roles. The discussion was very thoughtful, even though many students indicated that they had never before considered these issues on a personal level.

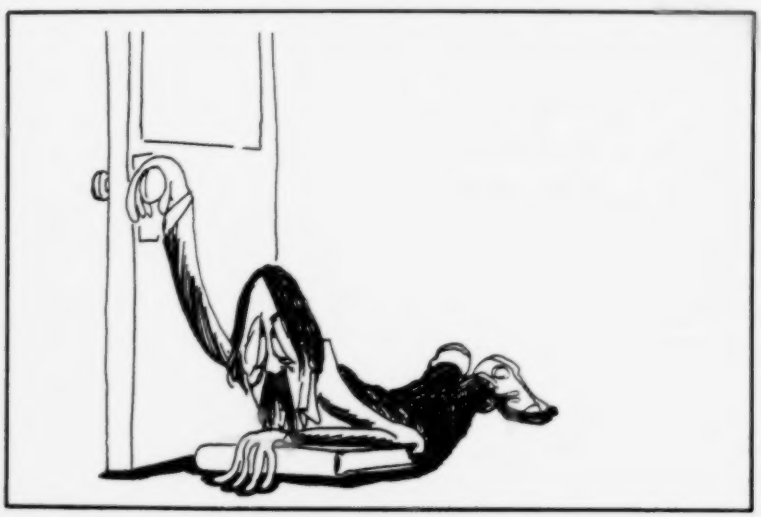
Classes do vary and I have had some which prefer to start with basic factual questions. Overlong silences and blank stares should prompt the TA to ask either the same question in a different way or to ask a much simpler question altogether. Give students ample time to think, however. Remember, they haven't thought out the questions and material in the same way you have. Contrary to some instructors, I have found calling on students a not-so-draconian way of starting a discussion. I always give them the liberty to "pass" if they wish, but find that quieter, well-prepared students often need (and want) some prompting.

Beneath all the planning and thinking that goes into teaching section must be an unbridled enthusiasm and a willingness to be creative and flexible in the classroom. It is your preparation, thoughtfulness, and enthusiasm as much as your intellect that students appreciate.

—Robyn Lipner

Discussion Sections in the Sciences

As a new TA in the sciences you will probably be teaching a number of discussion sections for very large introductory courses. Your students will be first- or second-year undergraduates still learning to adjust to a large bureaucratic university. So begin your preparation to teach by appreciating your students' situation. Be sensitive. Remember that many undergraduates are intimidated by Berkeley's impersonal character, by the crowded lecture courses they are forced to attend, and probably by you as well.



Try not to overprepare, unless you thrive on burnout.

Recognizing this insecurity may help clarify what ought to be the priority of all instructors, namely that the students learn. There is a distinction between the teacher teaching and the students actually learning; all too often both do not happen. Many beginning TAs, because of a lack of sensitivity or their own insecurity, lose track of this apparently simple point. You are there to help them understand the material and not for your own edification; you must therefore be aware of signals that you are boring the class or losing them completely. Keep in mind that your section and office hours offer first- and second-year students one of their few chances for an education that is not geared for hundreds.

Encouraging Participation

How do you consistently foster discussion, elicit questions, encourage dissent? The section is the only time when the students can hope to have their individual questions and misunderstandings addressed. Your *style* of teaching is more important than the precise content in encouraging students to tell you what they need from section. Hence you should try to be as personable, informal, and friendly as you can in order to encourage the asking of "stupid" questions. I am not advocating the sacrifice of rigor for comfort—the purpose of being informal and friendly is to encourage the class to perceive the TA as being readily available and to make the subject as accessible as possible. Allow yourself some opportunity for you own sense of humor, your own (perhaps whimsical) examples, and so on. This is not wasted time as long as you keep clearly in mind the purpose of the pedagogical example and bring the discussion back to that point.

To teach in such a loose and informal style requires confidence that you can keep the discussion on track and also cover the material. To enhance your confidence, particularly if you tend to freeze before a class, *be prepared.* The students will know if you are not and will resent your not taking them and their education

seriously. Remember that what most of them cannot do for themselves is to separate the important from the secondary in the material presented to them: what is obviously important to you after several years' study is not obviously important to them. So picking out the fundamentals in the current chapter and discussing their logical structure is often the most effective use of the discussion hour. This doesn't mean that you must lecture the students. They get enough of that already. But you may find the class needs a succinct presentation of the lecture material, especially if the professor is not a good teacher.

Discussion Strategies

Read the material yourself. Think about how best to organize the material by selecting three or four fundamental principles. Prepare specific examples or problems to illustrate each one. If possible, choose problems similar to those for which the students are responsible. As you go through the material, try to involve the class in solving the problems. Don't say, "Does anyone know how to do this one?" as those who know straight away probably don't need your help. Ask instead, "Does anyone see a way to begin?" If you're still not getting any response, ask if anyone has a guess. If no one suggests anything say, "Let's back up a bit." Then repeat the material that should provide them with a clue as to how to analyze the problem. Make sure they understand the problem, and ask again for suggestions. If you've still no response, solve the problem *slowly*, all the while tying in the material that they seem not to have understood. And then go home and think hard about your teaching!

A lack of participation is sometimes a reflection of the teaching style of the TA and not of the innate ability or interest of the class. I mean that quite literally—if you're bored, they will be too; if you seem to be having difficulty because of a lack of preparation, they won't venture to offer ideas. If you are prepared, excited by the subject, and confident enough to be relaxed before the class, most students will respond. When you are asked a question to which you don't know the answer, handle the situation without panicking: the students will be encouraged to offer ideas of which they may be doubtful because they will perceive that you accept mistakes as part of the learning process. When you don't know the answer, say so, ask if anyone does, and if after a few minutes you're still at sea, say so, and say you'll get back to them next week—and do.

Evaluating Your Teaching Effectiveness

When your teaching is not going well several signs appear: everyone reads during section, no one offers suggestions, attendance is down to your brother's best friend, and your section grades are worse than those of the other TAs. You may be overestimating—and thus intimidating—your students, or you may be underestimating them, in which case their reaction will be righteous resentment of your patronizing attitude. My simple-minded advice is to check with the class—ask! "I'm not sure whether you all understand this or whether I'm just confusing you."

Another balance to maintain is that between explanation of material and problem solving. You will probably find that the students want you to solve problems—not just any problems, but the homework problems. You might want to do some occasionally, but you should try to think of parallel or contrasting problems to work with the class and point out why this method is similar, or different but more appropriate, etc. If you consistently do what I suggested above—clarify the fundamental organizing principles and work appropriate examples that illustrate them—then you will have a good answer ready to the most frustrating questions students ask: "What's on the exam? How do you solve this one?" In short, you should try explicitly to teach *methods* of problem solving rather than particular solutions; always try to apply the methods to important rather than peripheral topics.

First Class

The first section meeting helps set the tone for the rest of the term. If you are friendly, prepared, knowledgeable, accessible, and demonstrate an attitude of "at-your-service," then you will probably have more interesting, enjoyable, and fruitful discussions throughout the term. Ensure that the class understands the mechanics of the course, the prerequisites, and the workload. I always have students fill out index cards with their names, phone numbers, years, and majors. I ask them to tell me something about themselves such as motivation for taking the course, interests, hobbies, sports, etc. I write on the board for them the same information about myself. This may strike you as being *too* personal an approach, but I have found that if you're willing to do so, the class appreciates it and you also establish a tone of mutual interest and respect from the outset.

Give your students some advice on how best to study for the class, particularly if it is an introductory class. For example, stress that scientific knowledge is cumulative, and hence keeping up in class is very important. As I teach introductory physics classes, I stress the impor-

tance of reading the text slowly and critically; mere memorization will not get a student through the course, but the ability to abstract from one problem to another and recognize various themes in different disguises will. Especially in the first meeting, try to give them a start on the first problem set—they will appreciate it, they will come back, and they will feel that they have learned something specific and immediately applicable.

Special Issues

Pre-med students: My own experience with pre-med students has been pleasant; my sections did not seem competitive and the pressure they were under heightened their attention. It is, however, more difficult to get pre-med classes to feel free to ask those questions that indicate confusion or misunderstanding—i.e. those questions they most need to ask—since they tend to believe they must impress the TA. Again, my advice is to point out this tendency, to discuss the consequences of their not asking those questions, to assure the students that their understanding and hence their grades will be better if they straighten out those errors. Point out that section participation is much more important a criterion than anything else when it comes down to borderline grade discrimination such as plusses or minuses.

Racism, sexism, and homophobia: My experience is that it is not overt, developed prejudice that causes difficulties, but rather the insecurity felt by TAs and professors when confronted with students, other TAs, or professors of persuasions other than white, heterosexual and male. Try to instill in yourself and other TAs an attitude of professionalism—object to offensive remarks in the TA office, etc. Be critical of yourself no matter what your background. Try to avoid making judgments as to a person's ability based on irrelevant criteria. The difficulty, of course, is that racism, sexism, and homophobia are often only very subtly present, and so a continually self-critical attitude is the only way to try to change such attitudes in yourself and in those around you. For example, in the Physics Department I have encountered little explicit sexism, but have seen the following happen time after time with both myself and other women: two graduate students, one male and one female, are discussing some problem, and the exchange is fine until a second male comes in to join them. Typically, what happens is that suddenly the males are analyzing the problem, ignoring the woman and assuming implicitly that she isn't that interested or that her contribution won't be that helpful.

Cheating: Rather than handle this too prevalent problem on an ad hoc basis, establish procedures with the other TAs and professor that are clear to the students. Try to preclude the problem by ensuring adequate space for alternate seating in exams and so on.

—Libby Wood

Discussion Sections in Engineering

Berkeley's large student population can be both a strength and a weakness. While large classes can give rise to an interesting interplay of ideas both in and out of the classroom, the same large classes can prove to be stifling: professors delivering monologues during lectures, inadequate resources and facilities—all of these are a part of Berkeley. Discussions are an indispensable instructional medium in such an environment. To see why, let's look first at some general aspects of the discussion section, and then take up some specifics regarding discussion sections in engineering and the sciences.

A Functional Description of Sections

Discussions, to me, are best viewed as a bridge between various facets of undergraduate education. In large classes, discussions serve as a secondary level of instruction where the material covered in the lectures is surveyed and its finer points are clarified. Students often have a problem keeping up with the pace of instruction during lectures—this is inevitable; it is next to impossible to try to cater to the capacities of all the students in a large class. The discussion section helps alleviate this problem through review of the subject matter. Students who still have problems can then attend the office hours of the instructor or the TA. Discussion sections, then, have to be more personalized than lectures though not at quite the same level as office consultation.

A second major function of discussions is feedback. How well is the course proceeding? Is the pace too fast? Is the homework too difficult? It's important for the people running a course to ask themselves these questions constantly, and to realize that it is as essential to evaluate their

teaching as to evaluate students' performances. All too often, such information only surfaces when midterms are graded, by which time over half the semester is gone. A good TA will try to utilize discussion sections to gauge the general attitude and understanding of the students in the class. Indications of the progress of the students will come in several ways, as we will see below.

Some Realities

In the preceding section, I gave a rather idealistic description of the function of discussions. Let's look at some realities now, especially in regard to engineering and the sciences. A common complaint among TAs is that unless they use the discussions to solve homework problems, nobody shows up. Undergraduates typically are busy people, often contending with four or more homework assignments simultaneously. From their point of view, it is vital that time be used efficiently. This fosters an attitude (especially in engineering) that the short-range objective of turning in the completed assignment takes precedence over developing the understanding that the assignment is meant to help facilitate.

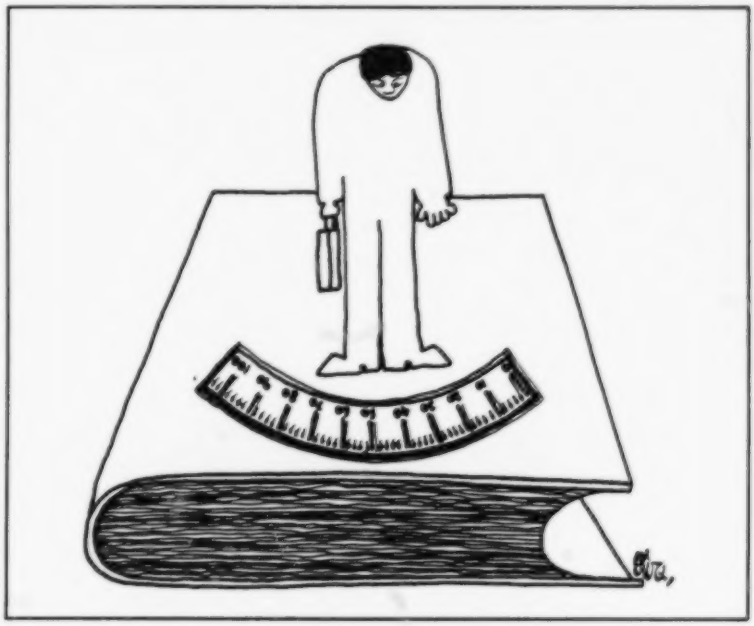
While some TAs place their principles first and stay clear of homework in the discussion section, my personal feeling is that a compromise is called for. Principles are all very well, but there is little to be gained if your sections are aimed at the die-hard few who attend every lecture and discussion regardless of content. What sort of compromise is required? How does one structure a discussion section anyway, given these realities?

The First Class

How does one conduct a section (and oneself) during the first meeting in a semester? If you're new to the business, relax. They aren't out to get you—not too long ago, presumably, you were one of them. Begin with the usual preliminaries of introducing yourself, giving your office number, office hours and so on. Don't try to plunge straight into the subject matter—there usually isn't much at the time of the first class, anyway. A colleague of mine suggested beginning the first class (and each subsequent class) by discussing the movies in town with the students. Such an approach certainly helps to get the students *talking*—something that often doesn't happen in a discussion section (rendering the word "discussion" a misnomer). Furthermore, students often go through several hours of classes at a stretch, and the few minutes of relaxation you provide will be highly appreciated. Spend some time encouraging students to visit you during office hours. Briefly touch on what was said in lecture, and then invite comments on the level of difficulty students experienced. Try to determine if a couple of review lectures in some topic might help (say Complex Variable Theory for a course on Fourier Analysis). Some judgment is required here, since every class will have someone who is weak on the prerequisites. Unless there are other course-related administrative matters, let them go at this point.

Subsequent Sections

The section's main function is to review the concepts presented in the lectures. Whenever possible capture the salient features of a lecture—main equations, theorems and relations—in a small one- or two-page handout. Paraphrase the equations briefly, stating their significance. Even though students take notes during lectures, it always helps them to see everything written out cleanly by someone who understands the subject better than they do. Fragments are often lost in the course of the lecture when the students' attention is divided between comprehension and note-taking. If there is a particularly difficult problem on the assignment, find or devise a problem illustrating some of the concepts needed for its solution and present it as part of the handout. Go over the latter problem in the discussion.



Try to use examples whenever there is a clamor for solving homework problems; go to class prepared with examples that are useful but do not give away the whole solution. This brings us to another important aspect of

effective teaching: preparation. Remember that you are the focus of the discussion and have to give it direction. Don't walk into a class and ask, "Well, what do you want to do today?" You must have a good idea of what you will talk about, which lecture concepts you wish to highlight (experience is the best guide here), which (if any) of the the homework problems need attention. Solve as many examples as you can—they boost the students' confidence.

A Feedback Mechanism

Mere verbal questioning isn't always enough when you are trying to use section as a means of getting feedback from you students. One technique I used was to prepare a brief quiz with four or five simple questions designed to take about five minutes. In addition, the sheet contained a large blank space for students to write their comments on how they felt the course (lectures as well as discussions) could be improved upon. I told students not to write their names on the quiz, and that it would not affect their grades in any way. These quizzes were a great success. The students felt that I *cared* about their input, and in future discussions they were more forthcoming in their suggestions. If you pick the right questions, you can test for common misconceptions and structure future discussion accordingly, and the blank spaces at the bottom can come back with some very good suggestions—discuss these with your professor. If there are other TAs handling discussion sections for the same course, encourage them to do the same.

Let's conclude with some don'ts. Don't bad-mouth the professor in the discussion section; it is true that some professors aren't the best of teachers, but nobody gains from your criticisms. Try, instead, to identify professors (in your own courses, possibly) who make good teachers, and emulate their teaching practices —this could be something as simple as stealing a one-liner. Don't dictate from a sheet of paper, or reel it off your head, since most students can only write as fast as you. It helps if you write everything down on the board. Bear in mind that the subject is newer to them than to you. Don't be patronizing—avoid proclamations like "Come on, when I was your age . . ." or "You know what some of you wrote in that last midterm . . ." At the very least, this inhibits bilateral discussion. Respect your students, for as you teach them the course, you are learning something from them—how to teach.

—Prabhakar Raghavan

Teaching Composition: 1A/B Series

1A/B, if arguably not the most loved course at Berkeley, is certainly one of the most earnestly sought after. The reason is simple: all undergraduates, with few exceptions, must pass this reading and composition sequence—whether in English, Comparative Literature, Rhetoric, Western Civilization, Afro-American Studies, or Asian American Studies—in order to graduate.

1A/B is, thus, one of the most important courses in the university curriculum. Moreover, its success depends a great deal on the effectiveness of graduate student employees who handle the vast majority of sections. Since many of you who are beginning work as TAs in 1A/B have never taught before, it's essential that you learn as quickly as you can the rudiments of teaching a reading and composition course. Even for those of you who have taught before—at high schools, community colleges, or even universities—some knowledge of the niceties of teaching this particular sequence is helpful. Of course, for any teacher new or old, the best training takes place when actually standing before a class or grappling with a student essay. However, before immersing yourself in the regime of the everyday, you might want to prepare yourself for two of the more problematic aspects of 1A/B: leading discussions and grading essays.

Conducting Discussions

Since most of your discussions will concern course readings, it's obviously important to have students read the assigned materials carefully. Such close reading, however, can become difficult for students harried by midterm or end-of-term assignments. To insure that most of the students read most of the material with adequate attention, make your assignments reasonable in length and difficulty. If you want to devote a session to Roland Barthes' *Mythologies*, assign a couple of essays rather than the whole collection. If students are not reading as conscientiously as you think they can, then have them come in with a question or give them a quiz or in-class writing assignment based on their homework.

In getting ready for a discussion, make sure that you prepare adequately. However, don't

overprepare. Nothing is more frustrating than spending hours on an elaborate, lock-step series of questions, only to have one bright student anticipate your culminating point in the first minute of discussion. Overpreparation can lead to sterile class meetings. If you force students to keep the narrow path your notes dictate, they may protest by turning silent.

I prefer to prepare less compulsively, writing up for myself no more than a half-dozen key questions. Out of these I select the one question which probes the reading most trenchantly. This then becomes the centerpiece around which I arrange the discussion. If I can get my students to wrestle with this one question, I count the discussion a success. This minimalist approach to discussion allows me the flexibility to digress into anecdote, joke, or contemporary allusion, to seize upon rare moments of spontaneous interest in the material, and to absorb students' particular concerns into the discussion. The improvisation that this approach entails also makes discussions more exciting for me.

I try to enliven class meetings by having my students also come up with questions. They bring these in; I write a few of them on the board, adding a few of my own; and then I guide the discussion, moving as coherently as I can from easier to more challenging questions. In this way, I make the students partially responsible for the content of discussions—a decision which challenges them to think hard about their reading and to participate with some passion in discussions.

Some quick pointers:

- Don't cram the blackboard with writing; erase to highlight new material.
- Make eye contact with students front and rear, left and right.
- Move about the classroom. There's no need to imitate Olivier; occasional movement will break the monotony of a figure frozen at center stage.
- Listen carefully; this is half the art of running a discussion.

Correcting Papers

Students will not find a writing course useful unless they are given responsibility for their own writing. You may be able to deliver a lucid lecture on the characteristics of a sound thesis; however, unless your students feel impelled to incorporate your ideas into their own writing, they will have lost the benefit of the lesson. One way to encourage responsibility is to grade your students' papers as if they were always a draft away from being finished. If you then give them the chance to revise their papers, they will read your remarks with a great deal more care. And, by reading your comments, they will find themselves forced to re-read their own writing with a cold eye to its strengths and weaknesses. Although you probably won't have the time to have your students revise all of their essays, you can give them a choice of rewriting one or two. In this way, they will feel an incentive to consider all of their essays in the light of possible revision.

To encourage your students to attend seriously to your comments, you need to keep several things in mind. Treat each paper, as much as you can, with respect. Read each essay twice, the first time preferably without making any substantial remarks. In making criticisms, address the writers' arguments rather than the writers themselves. Appeal to the writers' intelligence by making them active readers. Instead of declaring in the margin how the logic of a particular paragraph goes wrong, pose a question which asks the student to uncover the faulty syllogism.

Some students are easily intimidated by any language, even their own.

Without straining your capacity for sincerity, try to say something nice about the essay. An occasional "good" in the margin serves as a tonic to the student's self-esteem. Avoid the notorious "however" in your end comment. Nothing negates the force of your initial complimentary remarks like this hackneyed prelude to a critical blitzkrieg. Finish your end comment on a note of encouragement.

There are, of course, limits to one's patience in the face of bad writing. However, as much as you can, maintain at least an appearance of respect. Avoid sarcasm, even for those papers that leak indifference or hostility to the assignment. A terse "See me" is preferable to witty barbs. Be thorough, but don't drown the essay in red ink. Mark only obvious errors. If you quibble, you'll antagonize the writer needlessly. If a student makes the same kind of

error over and over again, identify the mistake and make the student responsible for correcting its further occurrences. This way you'll save yourself grading time and force the student to edit his or her own work more carefully. Make your comments short and to the point. You may want to use correction symbols to abbreviate the task of commenting. (See the list of symbols in this handbook.)

If you have the time, identify not only the occurrence of common errors but the rationale behind them. As Mina Shaughnessy in *Errors and Expectations* points out, all error involves choice on the writer's part. Unlike correct writers, erring ones rely on idiosyncratic, nonstandard conventions—but conventions nonetheless. By calling attention to these personal conventions and contrasting them with standard practices, you can help students to think through their mistakes. Use your end comment as a summary of the remarks you've made in the margins. Concentrate only on the most important problems with content, organization, and expression. And make clear that, in the event that the student chooses to revise the paper, he or she should focus on clearing up these more egregious problems. Keep a brief log, noting each student's major problems. In this way, you can track his or her performance through a series of essays. Write legibly.

Encourage students to come see you about their papers. Pass a sign-up sheet around in class. Or require that each of your students come see you at least twice during the semester. Emphasize that students should visit you prepared to lead a discussion of what they need to work on. Stress, too, that the quarter-hour they spend with you in your office can be more productive than any other quarter-hour in the course.

Grading Papers

Putting a grade on an essay can be one of the most troublesome aspects of 1A/B. As a TA, you'll be expected to conform to the grading scale the instructor in the course uses. Some instructors tend to grade more harshly than others. Some like to be more rigorous on the early papers and then grade more easily on the later ones; others grade consistently throughout the semester. You should try to discern the instructor's grading preferences as soon as possible. If you feel uncertain about whether you and the instructor are grading similarly, ask to grade a sample batch of early essays together.

Make sure that your grade reflects your comments about the essay. If you lavish praise on a paper and then give it a C, the writer will quickly lose trust in your judgment or your sincerity. Although it's difficult to separate the two, weigh thought more than expression. However, assign a single grade for the paper. I sometimes make and exception in grading ESL (English as a Second Language) students' essays. These papers sometimes show a decided mismatch between the writer's sophisticated thought and his or her scant linguistic resources. Split grades on these essays will indicate that, although the writers have not yet mastered basic rules of grammar or usage, they are capable of searching thought.

Don't be afraid to grade along the entire grading continuum. If you think an essay deserves an F, then give it one. However, always reserve yourself the opportunity to revise a grade by writing it in pencil. Consult the instructor if you're unsure whether to assign a particular grade. Once you're certain about a grade, write it in ink.

Correcting student papers—especially when you seem to be marking the same errors on a student's third essay as on the first and second—can be frustrating. To keep your exasperation at tolerable levels, remind yourself that you can rarely perform pedagogical miracles in a fifteen-week course. Cultivate a sense of pride in the craft of grading papers. This pride goes a long way toward sustaining you through stretches of bad writing. Remain alert to those moments when a student makes a small step toward becoming a more competent writer. And save the better students' papers for the end of a night of grading. You'll sleep better.

This article represents only a partial survey of teaching 1A/B. It doesn't pretend to be the definitive guide to teaching this course, nor does it intend to supplant any guidelines or suggestions that your department might publish. It will, I hope, serve as a supplement to any departmental aids for teaching composition courses. You should make use of all of these resources before stepping into your classroom. If you wish to read more on the subject of writing or teaching composition, you might want to pick from the following list of books. It brings together a range of approaches, methodologies, and styles.

Crews, Frederick. *The Random House Handbook*. Fourth Edition. New York: Random House, 1984.

Elbow, Peter. *Writing with Power: Techniques for Mastering the Writing Process*. New York: Oxford University Press, 1979.

Lanham, Richard A. *Revising Prose.* New York: Scribner's, 1979.

Shaughnessy, Mina P. *Errors and Expectations: A Guide for the Teacher of Basic Writing.* New York: Oxford University Press, 1977.

Strunk, William Jr. and E.B. White. *The Elements of Style.* Third Edition. New York: Macmillan, 1979.

Zinser, William. *On Writing Well: An Informal Guide to Writing Nonfiction.* Second Edition. New York: Harper & Row, 1980.

—John McBratney

Teaching Math Sections

It is hard to pinpoint the characteristics of a "good" TA. If you were to observe ten different good TAs in the Math Department, you would see ten different teaching styles. And the same person will probably teach different classes in different ways: what is appropriate in sophomore math for science majors may not be appropriate in an algebra class in which most students are Liberal Arts majors.

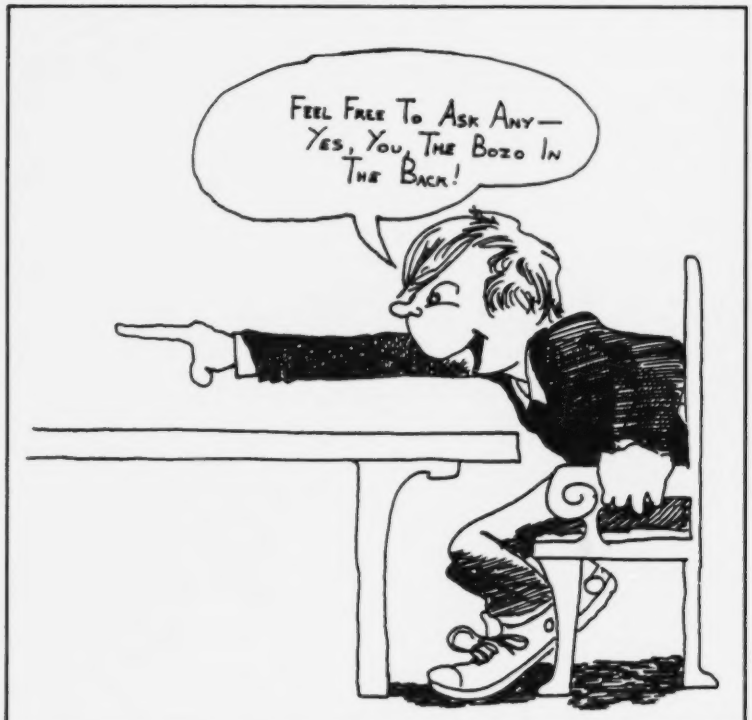
Nevertheless, there is an important underlying characteristic of good TAs, one that manifests itself in all good teachers: they are in some way motivated to teach. They are interested in what they teach and really want to convey what they know to their students. Their enthusiasm can be felt by the students and can be seen by any observer.

Motivating Students

Motivation is as important for the students as it is for the teacher. Obviously, even the best TAs can't motivate all of their students. But they can help motivate students by explaining the rationale behind the problems the students have been assigned. The typical question asked of a math TA is "Why are we studying X?" or "How do you use result Y?" In many cases the TA has no answer. To the TA, math is inherently interesting. But most students in lower-division math courses are not math majors; they are required to take these courses because math somehow applies to their own field. The best response to the typical questions is to give concrete, relevant examples.

For instance, if students ask these questions when studying differential equations, there are plenty of physical applications, including springs, electrical circuits, and bouyant objects in water. In first-year calculus, max./min. problems are good examples. In linear algebra, practical examples are harder to come by, but vectors in 3-space have geometric meaning and are useful since they can be visualized. Also, you can point out to the students that linear algebra is very useful for differential equations.

TAs must know where the subject is leading. Too many people treat each topic as an isolated tidbit of information rather than focusing on the interconnections and continuity of the subject matter. Tidbits are forgotten, whereas an integrated subject is not. Know what will be taught three weeks from now and let the students know that what they are studying now will be relevant later.



Stimulating Discussion

Students should be involved in discussion sections. Students can rarely ask questions in lecture, partly because in many cases this would break the continuity of the lecture. Discussion sections should be reserved for asking questions, working out difficult homework problems, clarifying points about the lecture, and generally filling in the gaps in a professor's lecture. Discussion section is a time to go over examples, not a time to prove the Cauchy-Schwartz inequality.

Getting students involved in section, however, is not so easy. Everyone is afraid to ask questions for fear of looking stupid in front of the class—but this reticence can be overcome with a little work. The first thing to do is to respond well when questions are asked. Treat every question as important even if it appears trivial or stupid to you. Brushing off these seemingly worthless questions will almost certainly deter the students from asking the more important questions. A second thing to do is to ask the students questions. A TA who walks in and simply inquires whether students have any questions is likely to get a dead silence and be misled into thinking that the students fully understand the subject. By asking specific questions, the TA will probably bring to light the points students do not understand.

Different Courses, Different Strategies

Instructional strategies also vary according to the type of course being taught. Math TAs are appointed mostly to four courses: P, 1A-B, 16A-B, and 50A-B (or to the self-paced versions of the first three). P and 16A-B are for students who are not interested in, and may even have an aversion to, math. Providing a large number of examples is especially important in these classes. Writing up a solution key to the homework would be helpful, since students in these classes are relatively unfamiliar with math and often prefer to spend the entire hour of section going over the homework problems. The idea of a "proof" is usually alien to such students, so proofs should be meticulously avoided.

The 1 series and 50 series attract mostly science and engineering majors. These students should at least understand the idea of a proof or why things need to be proved. Even in these classes, however, the TA should not spend much time proving theorems. Proofs are the responsibility of the professor, and the TA should simply attempt to clarify what was proven in lecture or assigned in the homework. In these classes, however, it is useful to try to make the subject matter relevant to the students by trying to draw in examples which might be of use to, say, physics or engineering majors. Because the students in these classes generally are science majors, you can assume a greater basic knowledge of math when you teach, which means that you deal with relatively more sophisticated problems in section.

Grading

Grading in math sections is structured in such a way as to minimize variation among TAs. Generally the professor is responsible for designing all the quizzes and exams. After the exams are handed in, the professor and each TA are responsible for grading a specific section of every exam; this helps ensure consistent standards.

This does not mean, however, that individual TAs have no say in the final grades assigned to the students in their sections. Students at the end of the semester will have a numerical point total which should translate into a specific grade. But the infamous "fudge factor"—that small part of the grade which derives from the students' participation in section—can very well make the difference between, say, a C+ and a B-. Many TAs give their students surprise quizzes. Even though these quizzes do not count, they help form the TA's opinion of each student's performance which in turn influences every student's fudge factor at the end of the year. Such quizzes also help TAs identify the areas not adequately understood by students; if the quizzes are uniformly bad, then they may be a signal that the TA is not getting through to students and that other pedagogical tactics should be used in section.

Grade disputes with students are relatively easy to solve in math. Arbitrariness is limited because students are either right or wrong in their efforts to solve problems. Variation is further minimized by having each TA grade a certain part of all of the exams. But these precautions are not foolproof. When TAs grade the first few exams, their expectations are generally too high. Therefore, it is important to read through several solutions to get a sense of what to expect before you begin to assign scores. Otherwise, those students whose exams you first open may suffer because of your unreasonably high initial expectations.

In spite of such precautions, grade disputes occur regularly. It is important to treat every grade dispute openly, but it is also essential to be firm. Try to distinguish frivolous grade complaints from valid objections. Some students habitually complain about the grades assigned to their work. If you give in to them early in the semester over a trivial point, then you can rest assured that you will see them in office hours after every subsequent exam. On the other hand, make sure not to be tyrannical. It is conceivable that you or another TA made an error—perhaps the exam was the last one you graded at 2:30am when your eyes were half closed. If another TA was responsible for misgrading that part of your student's exam, then perhaps you ought to intercede on behalf of your student with the other TA. Obviously, your opinion carries more weight with a colleague than that of a student.

TA Training

All new math TAs are required to take Math 300, the teaching workshop. This is a time for TAs to learn more specific techniques about teaching and to ask questions. Many of the ideas presented in this article may be elaborated upon in greater detail in the 300 class, especially if the leader of the workshop is a good teacher.

—David Sanker

Teaching a Foreign Language

The great majority of TAs of foreign languages begin their teaching assignment with little or no experience. The individual departments hold training sessions during the semester. The instructor in charge will supervise the training session, or, as in the case of the French Department, give a pilot lesson to be attended by all first-year TAs. The lesson serves as a model for the TAs in their individual classes. These training sessions explain teaching methodology and address personal problems the new TA might encounter in the classroom. The new TA should not only attend the training sessions, but also discuss all aspects of teaching with the instructor in charge. These discussions should cover terms of grammar, sentence patterning, drill instructions and use of the language lab.

Planning

Each department has its own syllabus and a slightly varying approach to language teaching. TAs have to plan their own lessons in accordance with the given syllabus, although usually they are given latitude to develop individual teaching styles. Extra-syllabus, audio-visual teaching aides that fit the context of the given stage of instruction should be brought into the class. Instructions should always be given in the target language. Students should be encouraged to ask questions in the target language. Even general announcements should be given in the language of instruction. This will prevent the foreign language from being reduced to a mere novelty of the classroom, divorced from the "real world" (homework assignments, jokes, private conversations, etc.) in which English predominates.

Each TA should outline the course of each lesson, and conduct it in a relatively fixed pattern. The class outline might include: 1) 10 min. warm-up, announcements, homework; 2) 15 min. drills and introduction of new material; 3) 20 min. conversation; 4) 5 min. wrap-up. The time allotted to these four class segments can be varied slightly, but the basic pattern should be observed.

Warm-Up

The purpose of the warm-up at the beginning of each lesson is to lead the student—who might have just come from a class in a different department and find it difficult to switch into a foreign language—into the language by means of a slight review of the material previously introduced. The warm-up can be conducted with jokes, personal experiences of the student,

pictures which can be described. Students can be encouraged to bring their own material.

Drills and New Material

This period of instruction must involve all students. It is designed to drill familiar patterns by a continuous question-answer dialogue between teacher and student. Various drills should be used such as phonological, morphological, syntactic, and lexical, gradually leading the student away from mere repetition of the answer towards active dialogue, with the instructor functioning only in a corrective role. This segment of the class can easily become dry, so TAs should draw upon their creative and imaginative abilities to make the drill enjoyable

and lively.

New material is also introduced during this section, along the same lines of pattern drills. The instructor should focus particularly on the correction phase. A mistake made by a student in response to the teacher's question should be corrected immediately and clearly to help the entire class understand the error. Introduction of audio-visual material (slides, pictures, maps, etc.) is also helpful.

Conversation

This major part of the language instruction utilizes all material introduced to this point in the course. In this period the class could be broken up into small groups. Small group work provides an opportunity for students to practice speaking and listening without being on public display. It also provides a chance for them to get to know one another better and people generally feel more comfortable sharing in a small-scale discussion. Small groups can be used for dialogue and homework review or for "free conversation" time and working on projects. Having the class move from large to small groupings also helps break the hour into manageable time blocks. This combats boredom and "drill fatigue."

Wrap-Up

The wrap-up period involves a review of all the material introduced during the class session. It can take any of the various groups indicated. Its purpose is to make the students feel at ease with the new material. Homework assignments should be given at this time as well.

Personalized Material

Whenever possible, questions, drills, and examples should be developed that relate to students' lives. Students will be more interested in even the most routine work if they have an opportunity to share information from a personal perspective rather than deal solely with abstraction. The personal perspective helps students get to know one another, which makes for a friendlier classroom.

Blackboard Use: Pros & Cons

The blackboard should be used to demonstrate the steps towards solving a problem. Notes on the board should be well-structured and organized. The board should be cleaned after the problem has been solved, so as not to distract or confuse the class.

To explain certain structures, cartoons, plans, and maps may be put on the board—no artistic value necessary. The major argument of the audio-lingual approach against the use of the blackboard is the danger of interference with the native language, i.e. a grapheme of the target language on the board does not or will not necessarily correspond with the pronunciation of the native language. So the argument runs that these interferences establish pronunciation mistakes that are subsequently difficult to get rid of. Students listen to the instructor and produce their own utterances imitating him or her without seeing what they have said.

Office Hours and the Language TA

Many TAs complain that they sit passively in their offices waiting for students to show up, especially in the beginning of a semester. It is a good idea for TAs to extend invitations to their offices to help instill an "office-hour habit" in their students. The set-up of the office hours can vary; one could be used for individual consultations and another for group conversational practice. You can meet students in the language lab during one of your office hours. Beginning students especially appreciate this. You should urge students continuously to make use of the office hours whenever they encounter any problem in class.

—Herbert Genzmer and Elizabeth Schwertschkow

Introduction to Lab Sections

The purpose of most laboratory experiences is to bridge the gap between theoretical and technical/practical considerations. In the sciences, laboratories have traditionally been taught with three main objectives. These are: 1) acquisition of specific lab techniques (e.g.: preparing an agar plate or performing a careful dissection); 2) sharpening the analytical skills of science (e.g.: observing, classifying, inferring, stating hypothesis, designing experiments); and 3) obtaining concrete experience with abstract ideas (e.g.: measuring angular momentum or observing capillary action). On a more personal level, laboratories offer students an opportunity to become involved in and attain a stronger identification with the discipline. In addition, they encourage the often neglected social aspect of learning. Lab work allows more interaction among students and between students and instructors than is possible in lectures or even large discussion sections.

Several science departments on campus—

geology, chemistry, physics, paleontology, and zoology, to name just a few—offer laboratory courses. Laboratory teaching policy varies greatly among departments and even among courses. However, a few guidelines may be generally useful to the laboratory TA.

The role of the teaching assistant in most labs is to provide direction and assistance, and to serve as a reference for students as they conduct their own work. The lab section is not meant to consist of a three-hour long monologue by you on the virtues of science or the relevance of the lab exercise. Resist the temptation to lecture unduly to students in lab.

Preparing for the Lab

The main secret to a well-run lab is the old Boy Scout motto: Be Prepared. If you do not have to set up the lab frantically as students are streaming in the door, you will feel more relaxed and confident as a TA. You can take several key actions to assure this:

1) Read the assigned lab in the lab manual thoroughly at least several days beforehand. Look up any terms or concepts which are unfamiliar to you. Unless you are teaching a very basic course, there are bound to be a few. It can be most embarrassing to stare blankly into space when students ask you about some concept which was presented in the lab manual.

2) Prepare a brief introduction to the lab. This will vary, but may include pertinent announcements of field trips or exams, a call for questions from the last lab or lecture, an outline of the present exercise, rationale or purpose for the lab, and clarification of any confusing concepts in the lab manual.

3) Conduct the entire experiment yourself at least several hours in advance. This is a must. It is not enough to have completed a similar experiment four years ago as a freshman at Podunk College. Experiments present unique difficulties for students depending on the organism used, chemicals available or even the equipment employed. You should be familiar with the tricky aspects of each experiment before class. Don't cut short the time necessary for this. It is an integral part of what you are paid for as a TA. Some large introductory courses ask TAs to perform lab experiments at weekly meetings.

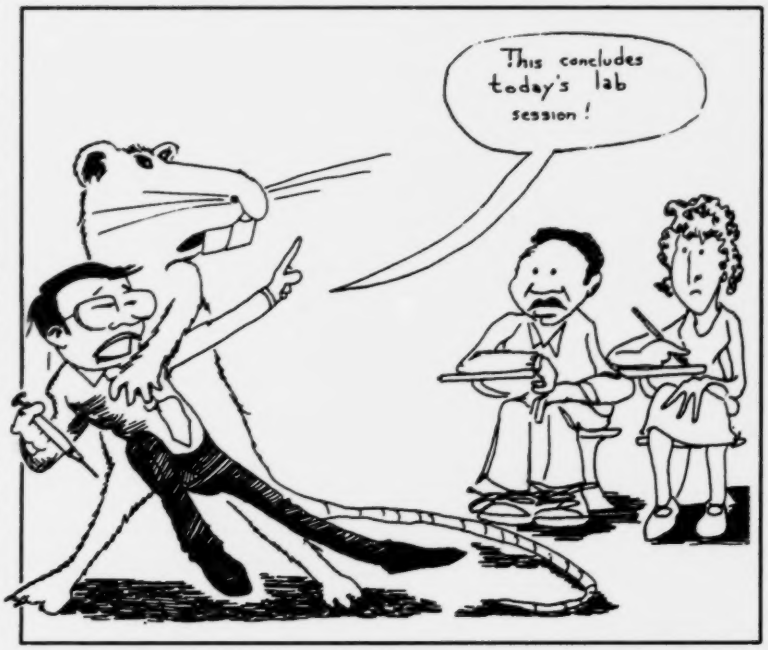
4) Refamiliarize yourself with the subject you will be teaching in lab. This involves reading the course text or reference books and bringing them to the lab for student use. Be sure that you feel comfortable and knowledgeable about the material before lab.

5) Perform all calculations for the lab and keep a record to use in aiding students. Miscalculating a formula repeatedly greatly confuses students.

6) Make sure that all necessary equipment and supplies are ready before the start of lab. Nothing is worse than having to search the entire building for some crucial piece of apparatus while your students twiddle their thumbs or take a nap.

7) Grade any tests or lab reports and return them at the beginning of each lab. Over several years of teaching I have found that if I return work promptly, students will have more time for review and will consequently perform better on exams.

8) Go into the lab early and write a brief outline of the day's exercise on the blackboard.



It is always best to test your experiments before demonstrating them to the class.

This will serve as a reference during your introduction and help focus student attention at the start of lab.

Conducting the Lab

If you have prepared well, you are now ready to interact with students and enjoy the lab. Several points to remember are:

1) Begin on time. If you do so consistently, lo and behold, latecomers may eventually arrive on time as they perceive that you will not wait for them.

2) At the first lab of the semester, clearly present the goals of the course, a preview of lab activities, dates of exams and field trips, grading and attendance policies, supplies required and where to find them, and your office location and hours. It also helps to tell

students about your special area of interest and research within the field. Set the tone for the semester by being friendly but firm, and communicate your interest in making the lab an enjoyable experience. (See the section on the first class for more).

3) Introduce the lab. Be quite brief. After all, the students are here to conduct the lab, not listen to you lecture. Use the outline you prepared.

4) Demonstrate any tricky techniques and point out the location of special materials. Gather the class close for this, and encourage questions. This will allow you to avoid explaining the same procedure ten times in the first half hour.

5) Assess students' degree of preparation for lab. Ask them to explain the required techniques or answer key questions. This will communicate to them that you care whether or not they are prepared and will find out if they are not. If students consistently arrive unprepared, you may try giving short quizzes (check with the course professor first), or grade introductions to lab reports at the start of the lab.

6) As the lab progresses, make contact with each student to determine whether she or he understands the procedure or is lost. Ask them thought-questions about the purpose or application of the experiment. You must take the initiative here, as students often are too shy to ask for help, especially early in the semester.

7) Never feign the answer to a question. Instead, if you don't know the answer, be willing to look it up in a reference text or the lab manual, or ask another TA or a professor. Students will respect you for being honest and will trust the correct answers which you do give. The TA does not know everything, and the sooner they learn this, the better. You should, however, be able to direct the students to adequate references and diagrams.

8) Enforce laboratory safety rules. You are responsible for student safety, and it is up to you to require the use of safety glasses, chemical hoods, or gloves. Students are often simply unaware of danger in the lab and depend on you to enforce the rules.

9) Announce the time to be allotted for each experiment. Many labs are too short and unless you pace students they will not finish in time.

10) If you use the blackboard, be clear and concise. Write as little as possible, and only in outline form.

11) Instruct students in detail as to the format of lab reports. If you are specific, they may even be well organized and consequently much easier to grade.

12) If you wish to make a salient point or clarify a procedure during the middle of lab, first attract the attention of the entire class. Do not expect students to drop their experiments immediately and listen if you stand in one corner and speak softly. By first making sure that everyone is listening, you communicate your point to all and avoid the frustration of talking to thin air.

13) Ending the lab: At least fifteen minutes before the end of lab, encourage the students to clean up, finish experiments, and hand in reports. If students are interested, conduct a short review or question-and-answer session.

Miscellaneous Aspects of Teaching

1) Learn students' names as quickly as possible. They will respond to you better if you acknowledge them personally.

2) Offer a review session before each exam. These should be held one week to several days before exams, at a time which is convenient to a majority of the class. Ask students to come with questions, or prepare a few to ask them.

3) If possible obtain and post old exam questions. Students have a right to know the types and format of questions on exams. Always obtain permission from the course professor first. If denied, draw up sample questions of your own for students.

Obviously not all of these guidelines apply to every science lab taught at Berkeley. But if you selectively apply them to your needs as a laboratory TA, you will find teaching labs to be a rewarding and even enjoyable experience.

—Nan Chadwick

Teaching a Life Science Lab Section

Being a teaching assistant in the life sciences can be a very different experience from that in the other disciplines. Not only are the TAs often conducting discussion sections, but many life science courses also involve lab sections in which the TA faces various problems, many of which are unique to the life sciences. Each area of the sciences can require a different approach to teaching.

There are courses offered by the different departments in the life sciences that are specifically designed to aid TAs. These courses are

offered for two units and usually have a course number in the 300 series. They are designed to aid the TA in understanding theories and methods of science teaching at the university level. The course catalogue contains the relevant information for those graduate students who are interested.

Lab Safety

Another resource available to the TA is the informative lecture series offered by Environmental Health and Safety in late August. TAs in the life sciences may confront the possibility of working with hazardous materials, and since they are responsible for conveying to their students the importance of safety procedures, a good understanding of these procedures is a valuable tool. Information about the lecture series is posted on the bulletin boards in the Life Sciences Building or can be obtained directly from Environmental Health and Safety on Fulton Street.

In addition to working with hazardous materials, lab sections in the life sciences often present unique situations in which lab safety should be heavily stressed. All teaching assistants should know the dos and don'ts of dealing with live materials. This information may not always be automatically given and an inquisitive TA may be the only one to get it. After all relevant safety information for each lab is obtained from the professor or the research assistant, it should be presented clearly and repeatedly to students by the TA. A note on the board can stand as a constant reminder during the period. There is no substitute for a safe lab.

Another unique problem in many of the life science lab courses is the personal attitude many students have toward working with live material. The TA may face attitudes ranging from concern about animal rights to just plain squeamishness, especially in some of the lower-division lab courses. The best way to deal with this is not to force the issue. Allow the student to observe the procedure or, if necessary, leave the room. Often one-to-one conversations can be helpful because knowing the students' future plans can be a vital link in understanding where they are and how to deal with them. Certainly a pre-med student would need to overcome a certain amount of squeamishness!

Conducting Lab

Lab periods should always begin with a brief introduction and discussion period. The best time to discuss the prior week's lab is at the beginning of the period if time permits. (Students tend to scatter towards the end of the period.) Discussing and interpreting results is one of the keys to successful science and students need to be comfortable with this. Often experiments don't turn out exactly as predicted because live material is not always predictable. Students need to learn to trust their observational skills and freely explore different possible interpretations. Open discussions can stimulate this.

To introduce the lab for the day, leading questions about the purpose and the procedure can be a good way to get things started. In order to prevent the "cookbook" method of science, an understanding of the lab prior to its start is a real plus. Preparation for lab is critical. Unprepared students take longer, make more mistakes, and tend to be in a general fog the whole period. Some methods to encourage preparation are:

1) Pop quizzes.

2) Write-ups in the lab notebooks of an introduction or purpose of lab.

3) Allowing 15 minutes at the beginning of the period to read the lab.

4) Discussing the lab procedures and outlining them on the board.

5) Nagging.

Obtaining the professor's approval or knowing course policy is important in some of these cases. Sometimes it is necessary to devote time at the beginning of the period for background lecturing. There may be times when the lab and the lecture do not coincide, and consequently it is up to the TA to devote some time to the

missing link. Preparation with the professor and the textbook is usually necessary in these cases. Point out difficult or confusing points before lab gets started so the students are aware of them.

Most labs should be run through at least once by the TA before presenting them to a room full of students. Arriving at the lab before class enables you to be sure the set-up is complete. This can often save long delays which might occur during class as you search for important materials, tools or pieces of equipment necessary for the experiment. Often students have no idea how fast or slow they are going, so the TA should help regulate their time. Pace the students so that the whole lab period proceeds as comfortably as possible. If you have time, seek out the students who are having problems.

Clean-up should be the students' responsibility. This should be emphasized from the very first lab period. A clean and organized lab helps to make a lab session run smoothly. A TA devotes enough time to teaching and has enough responsibilities and should not have to take care of the students' clean-up duties. A good TA does not have to be completely overworked.

Testing and Grading

During the life science lab period, the teaching assistant often has time to circulate around the room and give individual attention to those that need it. TAs should make personal contact with as many students as possible during the lab period to encourage and guide them. This is often possible because many of the lab sections are designed to have relatively few students in comparison to the lecture. This creates a good learning environment in which you can encourage students individually by pointing out their good results, examples or techniques to the class. This can also be beneficial to the students experiencing difficulty with things like dissection techniques or recognizing particular tissues under the microscope. If someone has the results that are "supposed to happen," it should be pointed out to those who get no results or confusing results.

The TA is often called upon to help design the lab practicals. Working closely with the students can help the TA formulate questions for the exam. Several methods can be used to ease the pain of this chore. Lab notebooks are sometimes required as part of the course, but if they are not, encourage students to keep one. Discussing an organized format can be helpful to students both in the lab and when it comes time to study. A quick check through the students' notebooks prior to the lab practicals gives the TA ideas for questions to ask and some insight into the areas that the students have trouble grasping.

Life science labs can vary in the amount of homework required from the student. Most homework consists of lab preparation and write-ups. The TA's responsibilities concerning homework may also vary, but if write-ups are required the TA should be prepared to spend several hours a week grading. Grading exams from both the lecture and the lab is often a TA responsibility.

When it comes to determination of the final grade, the professor may ask the TA for help in evaluating the student. The TA has the opportunity to work more closely with the student than the professor; consequently, the TA can in some cases help decide whether a student should get a C+ or a B-. Glancing at notebooks and circulating during the lab period can help the TA in making these decisions. Knowing the students can be an important part of the TA experience.

Review sessions before exams are sometimes left up to the TA. Looking at notebooks can be helpful for the lab practicals but not necessarily for lecture exams. Attending lectures regularly is a must if you plan to offer a review session before a lecture exam. Most professors give exams on lecture material, so a good review of lecture notes is often adequate for thinking of areas to discuss during the review sessions. A handout with sample exam questions is always appreciated by the students, as is the availability of old exams on reserve in the library. But old exams should only be circulated after obtaining the professor's consent.

Teaching a lower-division life science section can be very different from teaching an upper-division course when it comes to dealing with individuals and their attitudes. Lower-division courses have a certain percentage of students who are taking the class only to fulfill a requirement and are satisfied with a passing grade. Upper-division courses are filled with pre-med students and future research scientists who are not only quick, smart and inquisitive, but also ambitious. Sometimes they argue minor details on an exam answer worth half of a point as if it were a life and death matter. It is always good to know the policy of the professor before acting in these cases. Consistency and firmness are always recommended. When grading exams, make marks clear and specific to eliminate any possibility of student changes.

In this dog-eat-dog world of higher education, cheating is certainly something that has to be dealt with. Learn the policy of the professor in

handling these situations. Sometimes warnings may be given and sometimes immediate action is taken. Whatever the policy is, the TA should know how to respond.

—Holly Preece

Teaching an Engineering Lab

The First Lab Session

For a new engineering TA, the first lab is probably the most difficult session. The students come to the first lab curious to find out what they can expect from the lab itself and from the TA. But most new TAs are a little afraid to appear before the students. Such hesitation is only natural, but it is not difficult to overcome. A little preparation before going to the lab may alleviate your fears. Put down the topics you would like to discuss on a piece of paper and take it with you to the lab. Before class, think about what you would like to say on each topic you want to discuss. However, students are likely to have questions about things on which you have not prepared comments.

Gather all the students and address them collectively. You can start by introducing yourself. The introduction should contain your name, the location of your office, and your office hours. Other topics worth mentioning are the contents of the lab safety procedures, and your policies about grading and turning in the lab reports.

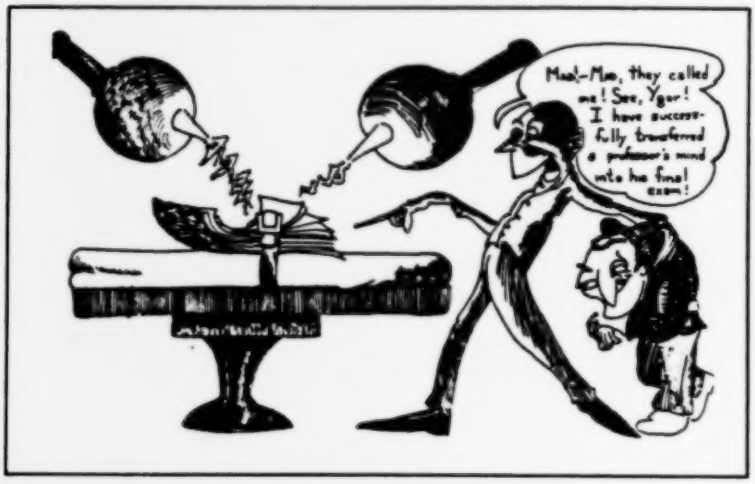
In some courses the first experiment is optional and in others the first lab session can be called off after the introduction. In a few courses, however, the amount of work to be done in the lab during the semester dictates that the students must carry out the first experiment in the initial lab session. In such cases it may be necessary to allow some extra time to make up for that spent during the introduction.

Grading

Grading is one of the important responsibilities of a lab TA. A discussion TA normally grades only one or two problems on each midterm and on the final exam, but a lab TA has to grade each lab for every student in his or her sections. This may create friction between the students and the TA. In some courses the TAs are given solutions to all the lab exercises by the professor or by the head TA, but in others the TAs are on their own, making it more difficult for the new TA. Here are some guidelines for efficient grading:

1) If you don't have an official solution to the lab exercises it may be a good idea to get a lab notebook from somebody who took the course in the past. Use that lab notebook only as a rough guide and don't hesitate to verify any doubtful results in the notebook by carrying out the experiment yourself.

2) In the first lab session, tell the students what you will be looking for in the lab reports besides numbers: for example, proper labeling of graphs; drawings of circuit diagrams and figures wherever appropriate; clear and to-the-point answers to questions asked in the lab handout. These are common sense things but many students will complain if not explicitly told about them beforehand.



3) If you make short comments whenever you take off points from student's work, you will help dissuade students from arguing about the points they lost. In general, students like to see points taken off for specific reasons rather than for overall quality of the report. If you do take off points because of things like lack of clarity or organization, make comments about it.

4) If many students make the same mistake in a given experiment, you may want to explain the relevant subject matter to all the students in the next lab session.

5) You are likely to get two types of grading appeals from your students. You will be asked to add a few points because you took off too much for an error or because you took off points for a correct answer. In the former case you are likely to have penalized equally everybody who made the same error and therefore you can say that in

the interest of fairness you cannot add points. In the latter case, check to see if you made an error: if so do not hesitate to rectify it. If you cannot make a decision on the spot, you might want to tell the student to turn in the lab notebook for regrading. The important thing is not to show annoyance. Even if you believe that the complaint is frivolous, you should remain calm and talk to the student firmly but politely.

Suggestions for Some Policies

Every lab has developed some policies over the years and it is best to keep them the same unless there have been genuine complaints from students in the past. The best sources of information about these policies are the professor and experienced TAs. If you are going to teach a new lab, here are some policy suggestions drawn from practice in existing labs:

1) You are likely to get requests from students to work in your absence in the lab if your class has a term project. You should not allow students to work in the lab during unscheduled time in your absence. Otherwise, you may be compromising safety regulations and possibly violating some departmental policy. Furthermore, if a piece of equipment breaks down in your absence, you may not be able to find out who did it and whether it was an accident or done intentionally to get an excuse for not turning in the work on time. Finally, it is not fair to those students who never asked but would have finished the work given the same privilege.

2) Quadrille-ruled lab notebooks seem to be best for engineering labs because they are very convenient for making linear graphs, circuit diagrams, and figures.

3) Most labs recommend that the students buy two lab notebooks, one for doing even labs and the other for doing odd labs. This will allow the students to have one whole week for writing the lab report and allow the TA one week to grade each lab report.

Office Hours

Generally the office hours of lab TAs are not as busy as those of discussion TAs. The questions you are likely to get in your office hours will be relevant to the report and to the questions explicitly asked in the lab handout. If your lab has a term project, you may want to encourage students to make use of your office hours to get your suggestions on their projects.

Interacting with the Students

Try to show your students that you want to be helpful. Start each lab session by gathering the students around the board. Explain to them the points you think are not clearly explained in the lab assignment. Whenever they have to use new equipment, give them a demonstration before they get a chance to use it. This will help them start out with confidence and reduce the number of questions you are likely to get about the use of the equipment. Before finishing at the board, ask students if they have any questions about the presentation or about the equipment. During the session, walk around the lab to see how the students are doing. If you sit at your desk most of the time doing work, the students generally get the impression that you are not interested in their problems. Often in an electronics lab you will be asked to check a broken circuit by a perplexed student. In such situations, it is good practice to explain as you proceed to find the problem. Make sure that students understand that you are trying to give them a feel for how they can do it themselves.

—Abdul Aziz Malik

Teaching a Computer Lab

Presently, almost the only classes using computers are those devoted exclusively to teaching students how to use or program computers: very few departments offer courses that incorporate computers in teaching their regular subject matter. Several departments or programs on campus have microcomputers or terminals of their own that may be used for instruction, however. TAs interested in using these computers in teaching should see the course head or their department office for further information. The Office of Instructional Technology has a variety of microcomputers and software in 211 Wheeler Hall that is available to anyone interested in developing software for course use. The Tolman Hall Microcomputer Facility with 40 Apple Macintoshes and 20 IBM PCs may be used by classes from any department, but the computers are heavily booked during the semester, so scheduling should be arranged as early as possible.

The classes now using the Tolman Hall Facility vary quite a bit, so it is difficult to generalize about how they are organized, or even what their purposes are in using computers. With that warning, this section first

briefly describes what might be expected of a TA in a course holding regular sections at Tolman Hall. Then it covers what teaching with computers in a laboratory setting is like, including specific problems and ways to handle them.

TA Responsibilities

Although there is perhaps no "typical" course for a computer laboratory we can take as an example the largest user of the Tolman Hall facility: Interdisciplinary Studies 110, "Introduction to Computers."

In any lab course, the TA's primary work is likely to be some balance of teaching in the lab and developing assignments. IDS 110 TAs are in charge of one section that meets twice a week for two hours per session, and assist in a second section (a total of eight hours per week in the lab). During these lab sessions, the students are to a large extent working independently on assignments from a course lab manual. TAs must be thoroughly familiar with this material, but do not themselves have to develop any of these assignments. At the end of the semester, however, students work on a project of their own choosing, and each TA is expected to produce suggested projects related to his or her field of study. Two office hours per week are considered normal, and these are likely to be busy during the time the students are working on projects. For the rest of the semester, they are normally a good time to read the *New York Times*. Many students who do not take advantage of office hours nevertheless appreciate review sessions before quizzes and exams. This can be an informal question-and-answer period requiring preparation from the students, not the TA. If two or three TAs hold a joint review session, they can easily spell each other for an hour or two.

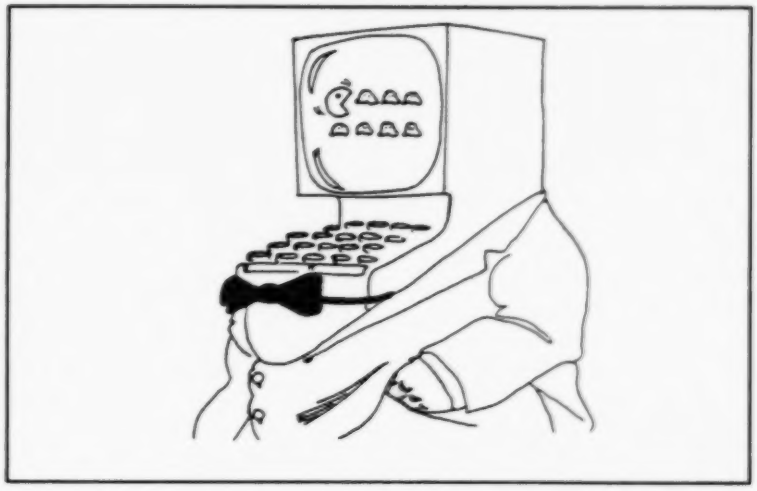
IDS 110 has three hours of lecture per week. TAs attend on a rotating schedule of about once a month, so that there is always at least one TA at each lecture. Computer demonstrations are frequently part of the lectures. These demonstrations (to help prepare students for upcoming labs) are given by TAs, again on a rotating basis.

TAs are required to attend a weekly planning and review meeting of about one hour. This is extremely important in IDS 110, since it is the only time all the course instructors get together, and can be a good opportunity for new TAs to ask questions if they are having any problems, or just need information.

TAs are normally responsible for grading students' lab work. In IDS 110, students turn in a worksheet they have filled out or a program they have written after each lab session, and TAs typically spend two to four hours a week correcting these. They give them only Satisfactory or Unsatisfactory marks, however. Midterms and the final are multiple-choice exams, machine graded from Scantron forms.

Teaching in a Laboratory Setting

Teaching a class in a computer laboratory like Tolman Hall falls somewhere between teaching in traditional computer science courses, where TAs leave assignments on a time-sharing system for students to come in and do at their leisure, and teaching in a traditional humanities or social science course where the TA typically leads discussion sections. As in traditional computer classes, students normally work on a set assignment, however open-ended or creative, and in part you serve as a consultant or troubleshooter when they get stuck. This doesn't mean you cease being a teacher: try to lead students to discover the right answer for themselves, rather than giving it away. Because students have a fixed amount of time to complete each assignment it is also your job to lead them as a group through the required material. You can do a number of small things to help them. Taking five minutes to review an important or difficult point before the students begin the lab can save everybody time later on. Circulate among the students as they work, and observe their progress. If you find that several students are having difficulty with the same problem, take them aside and work with them as a group. It is especially helpful here to use a large-screen monitor, if one is available, so that several students can conveniently view the same computer. Don't let students forget what time it is! It is easy for them to get wrapped up in one part of a lab assignment. You can help by reminding them periodically, either as indi-



A good computer science TA can interface in a user-friendly mode with non-computer science majors.

viduals or as a class, of roughly how far into the assignment they should be, but you must do this without making them feel rushed or panicked about time.

There are two keys to making your job more manageable: well-designed assignments, and well-prepared students. Keep careful notes of what parts of the assignments students find unclear or difficult, so that future revisions can take advantage of your observations. In courses with several TAs, TAs with earlier sections should share their experiences with the TAs teaching later. Nevertheless, even a well-designed assignment can be impossible if a student is not prepared. One technique that has proven effective involves short pre-lab assignments: students have to turn in a worksheet of four or five short questions before they receive any software necessary to the lab.

If it is possible within the framework of your course, encourage students not only to experiment and try to work things out for themselves, but also to ask each other questions, and help each other out in the lab. (Obviously this would not work in an exam.) This can help ease the burden of you watching out for all the students at once, and build self-confidence in your students when they realize they aren't dependent on the TA for everything. The balance between helping students past real sticking points and encouraging independent problem solving is a delicate one. You will gain a feel for it with experience and as you get to know your students, but always try to avoid simply doing students' work for them.

The physical setting of the computer laboratory encourages collaboration in small groups. Students in one block of carrels can work together without disturbing the rest of the class. This also means that it is difficult for you to get everyone's attention, and difficult for students to see and hear you. It is therefore usually best to limit any instructions or discussion to the beginning of the lab session, before students begin work.

Distributing software at the beginning of the section and collecting software and assignments at the end are undoubtedly the biggest headaches in using the Tolman facility. You are responsible for that stack of expensive disks, so you must keep track of how many you have signed out and to whom. Allow enough time to collect material at the end of the lab session: if students just throw things at you as they run out the door, you could well end up with fewer disks than you started with.

As much as anything else, your job is to establish the tone of the course. If you are teaching students who have not used computers before, they will probably feel somewhat threatened or intimidated, so it is important for you to be encouraging and positive. Over the course of a semester problems will arise: a hardware breakdown, perhaps an unnoticed error in the lab instructions. If your respond calmly, with confidence, the students will follow your example. You, the TA, are the students' personal contact with what may be a large course on a subject that seems very impersonal. The computer laboratory is a new setting for teaching, but as in any other course, the quality of the students' experience will depend significantly on how they relate to you.

—Denise Kiser and Neel Smith

Lecturing and Learning

I am not a great believer in lectures, though I have been giving them steadily for more than ten years now. I don't like them because they encourage passivity in students, when what you want to encourage is just the opposite—namely, thinking—and I don't like them because I find them emotionally and mentally draining. The better the lecture, the more this is true, at least for me, and though this can occasionally be exhilarating and is certainly always challenging, over the long haul of fifteen weeks, it is exhausting. In what follows, therefore, I can only offer a few of the techniques that I have found useful to avoid passivity in the audience and mental tiredness in oneself.

Q. What are some of the difficulties you first encountered when you began to lecture? What advice about lecturing would you give a beginning TA?

A. My first problem was—and still is—fear: all those faces out there, not knowing where they were in terms of knowledge of the field (my own is French and European history), and fear consequently that I would speak past them in some way. The most common response is to prepare as if the lecture were to be given to one's Ph.D. orals committee. I spent weeks reading up the first two lectures and making sure that I had read all the literature available. By the end of my first week, it became apparent that I couldn't keep up that pace and that the students weren't ready for or interested in the latest literature on 17th century France. They didn't know what went on, much less how to interpret

it. So, it's important to assume very little about one's audience and to learn how to pace oneself through not only the first week but the entire first year of teaching.

Lecture Preparation

Q. How is preparing a lecture different from preparing a discussion?

A. Perhaps teachers think they are too different. A good lecture will accomplish much of what a good discussion does: pose questions and encourage thinking about them. For me it is always helpful to think first about "facts" that must be conveyed. Why, I ask myself, would a Berkeley student want to know something about Louis XIV? If I cannot come up with something good in response, my lecture is in trouble.

Q. How do you incorporate a sense of audience into your lectures so they appeal to the majority of your students without being either too elementary or too difficult?

A. The first answer is that you can't entirely, and the second is that you keep trying different tacks. If you treat students as intelligent people without assuming that they've already read everything on the subject, it usually works in some way.

Q. How do you know while you are lecturing if it is successful or not? Have you had any experiences having to adjust your lectures on the spot according to the response you were getting?

A. You would be surprised how much difference the hour and location makes! When I've lectured 12:30-2pm in hot fifth story Dwinelle rooms, the students seemed sleepier than usual. I like to vary the pace by showing slides, playing music, stopping half-way to consider a particular document in detail, sometimes dividing the room up into halves for a debate between the students. I find it hard to listen to anyone longer than about 45 minutes, so you can be sure that the students feel that way too.

Audio-Visual Aids

Q. Are blackboard use and visual aids useful when lecturing?

A. Imagine a math class without equations on the board or human anatomy without pictures. In history, you either have to recreate a sense of the situation yourself or use pictures and music to help you do so. Since I'm not a very good actor, I prefer the audio-visual method. I can't imagine teaching without it, frankly.

Q. Is it more effective to work closely with a particular text when lecturing?

A. As time goes on, I become more and more partial to close readings in class. At first, I virtually ignored the readings in lectures, on the ground that it was insulting to students to think that they would need help reading. Very soon, I realized that this was a silly attitude. Students not only need help but they are sometimes all too eager to hear your view. It's important, consequently, not to just ladle out your own views on the reading, but to encourage questions.

Q. Do you find it is better to write out the entire lecture or to just have an outline or notes?

A. There is no "right" way in teaching, and everyone has to find their own style. What feels comfortable works best, in my view. I use a typed outline (4-5 pp. for an 80 minute lecture).

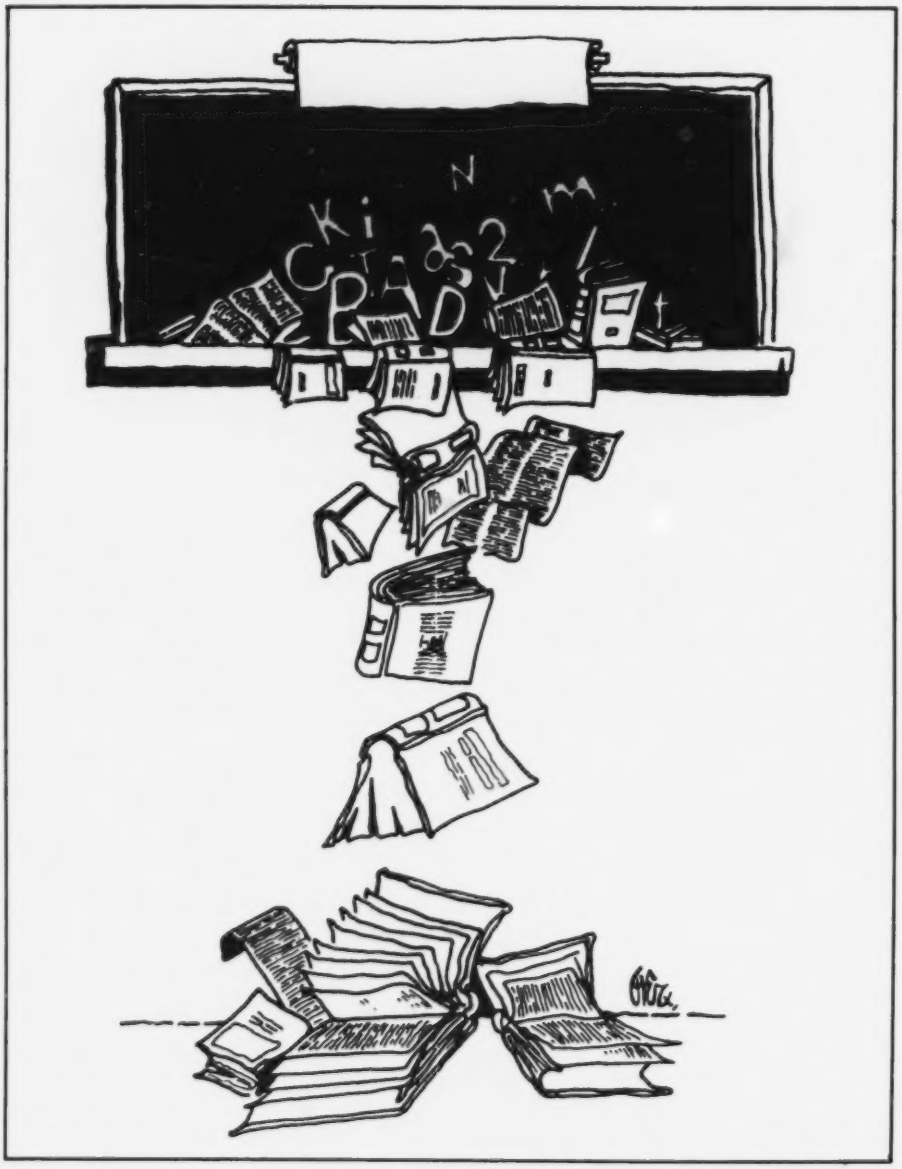
On the outline I have all the dates, statistics, and facts that I need along with a general sense of organization. This has the advantage of leaving me flexibility in terms of emphasis and timing, and it also leaves me room to update my lectures without having to rewrite everything all over again. I also hand out—or write on the board—a condensed version (one page) of the outline I use to lecture from. That way, students find it easy to follow my train of thought because they know exactly where I am. For me, there are three very important qualities to a good lecture: clarity, enthusiasm in delivery, and an overall sense of organization. Students want to understand what is happening, they want to know where the course is going, and they want to know why *you* think it's worth doing. There are probably as many ways to accomplish these objectives as there are teachers at Berkeley. The best way to work on your own techniques is to study the techniques of lecturers that you know. If you think about lecturing in terms of your own plans for the future, you will quickly discover what works and what doesn't.

—Lynn Hunt

III Classroom Dynamics

Berkeley undergraduates are an unusually diverse group. Your students may be 10 or 10,000 miles from home. Many will be Americans with ethnic or socio-economic backgrounds so dissimilar that they might as well be from different countries. They will span the ideological spectrum from radical to reactionary and may be politically active or apolitical. Some of your students will spend all their waking hours in Moffitt Library; others won't know where the library is. Some of your students may look up to you as a parental figure; others may have children your age. Teaching in such an environment is nothing if not stimulating: the classroom atmosphere will probably be cosmopolitan and you and your students will constantly confront novel perspectives.

This diversity, however, sometimes impedes the learning process by creating barriers between instructors and their students. It is your responsibility as a TA to try to dismantle as many of these barriers as possible. The articles in this section grapple with the political implications and responsibilities of teaching, the cultural barriers that divide students from each other and from their TAs, the persistent problems of racism and sexism at the University, and the dilemmas which confront TAs because they are hired to do professional work but lack the status of professionals.



Good TA/Bad TA

"On the first day of class, the TA walked in late. He was dressed in a three-piece suit. He stood up at the front of the class and said this was an introductory political science course. 'Everybody take out a piece of paper and, from memory, write the preamble to the U.S. Constitution. You will have ten minutes and the exercise will be graded.'

"Students had no idea what to do. Everyone got out their papers and started writing, some of them whispering nervously to their classmates.

" 'Quiet,' he said. 'There will be no talking.'

"So people got to work. After about two minutes, the TA uncrossed his arms, sat down, and put his feet up on his desk. He was barefoot in his three-piece suit.

Humbling thought: Any TA sure he can't make mistakes will have students sure *they* have.

" 'Why didn't anybody complain?' he demanded. 'Why didn't anybody walk out of class?'

"He then proceeded to tell us how we were programmed by the educational system to accept the authority of the teacher and likened us to a bunch of witless sheep."

The above incident is true, although it didn't take place at UC Berkeley. The TA was obviously trying to make a point, and an important one. Undergraduates are to a large extent "programmed" to accept without question what their TA or professor tells them. But the TA's method of demonstrating this unfortunate fact was insensitive, and contributed to the problem.

The TA in the example above thought he could help students by pointing out to them that their behavior was controlled, but he did it by controlling their behavior. Undergraduates are not stupid. If the TA truly wanted to teach the students that learning should be a two-way street and that the instructor should not be "obeyed" like a drill sargeant, then he should have attempted to create an atmosphere in the classroom where students' comments were heeded and their needs respected. Embarrassing them was not the solution.

The Tyrannical TA

This drill sergeant mentality can be a real problem for undergraduates. "The worst example I can think of was this one TA I had last semester," said one undergraduate. "He tried to be the big father figure and was so condescending. No one's opinion was correct unless it matched his own."

"On the whole," she continued, "TAs are not understanding enough of students' problems. They seem to have this attitude that they made it, so you should be able to."

TAs often forget just how intimidating and stifling their authority can be. They have institutional authority over students' grades, they have authority derived from their knowledge and expertise, and they have authority communicated by their body language and prominent place at the head of the class. As one student put it, "They're the ones up on their hind legs in front of the class."

Another student complained of a language TA who was so arrogant she would literally chastise any student who made even a small mistake. "She'd yell 'No, no, NO! That's wrong! You should know that!' "

And because of a TA's built-in authority, even a simple, seemingly innocent comment can have serious consequences for an undergraduate who is insecure about grades or performance.

"My TA came up to me at the beginning of a final exam and said he wanted to talk to me afterward," an undergraduate recalled. "I was terrified while taking the test wondering what he wanted to talk to me about. It was just so intimidating. It turned out afterward that what he wanted to talk about was minor, but I'm sure my work on the exam suffered from my worrying."

It's easy for TAs to forget how much power they have over students because they feel so powerless themselves. TAs are stuck at the bottom rung of the teaching hierarchy. Within the department, and the university as a whole, they have as little power as the undergraduates in their classroom. A TA's feelings of powerlessness, and the insecurity it can generate, exacerbates the problem of authority in the classroom. As one TA cynically said, "We're the lowest-level bureaucratic functionaries, and the insecurity of bottom-level bureaucrats causes them to get pretty petty sometimes."

Avoiding Condescension

Examples of outright authoritarianism and manipulation of students by TAs are relatively rare, but all the undergraduates interviewed for this article said they had perceived an attitude of superiority on the part of many of their TAs. This "attitude" manifested itself in a failure on the TA's part to take student comments seriously, and the air of condescension these TAs projected was off-putting. Comments ranged from "maybe I'm a little older than most students, but I just won't put up with that stuff," to "I just needed to pass, so I did the reading, showed up for the tests and skipped the rest of the sections."

One undergraduate spoke of what she called "this real superior attitude" on the part of some TAs:

"Someone will make a comment and the TA will say 'Un-huh, next question,' as if they're listening to something that to them has no relevance. I think it helps if TAs do comment on what you say. It shows that they have some sort of interest in what you have to offer."

Condescending TA comments can cause problems in the grading process. The criticisms which some undiplomatic TAs write on their students' papers are phrased in a manner which may embarrass or humiliate students rather than just correct them. "I'll never forget this TA I had at the first college I attended. I had handed in a 25-page paper, which I researched and wrote with great care. When I got my paper back from the TA all it had were comments condemning me for writing more than the 15 page requirement. And he had gone through the text crossing out every paragraph after page 15. It was the most idiotic and anti-intellectual thing I had ever seen. I lost all respect for him and lost all desire to invest time in the next assignment."

Condescension is more than just a peripheral issue related to personal teaching style. It can have a very direct impact on the quality of a student's education. If students skip sections, or lose all desire to do course assignments because of a TA's attitude, their education is short-changed. And the rewards of an open, engaging style of teaching make the damage condescension causes seem almost tragic. Many of the undergraduates whose comments made up the basis for this article said they enjoyed more and worked harder in classes where the TA challenged them, and respected their opinions and analyses.

"I've always appreciated TAs who had high standards," said one undergraduate. "If they expect a lot, it makes me work harder."

Many TAs have trouble taking their students seriously on an intellectual level. They feel undergraduates could not have accumulated much knowledge at such an early stage in their academic careers and believe there is little from them that a graduate can learn. And they seem to think the task of teaching them differs only in degree from teaching grade school students. As a result, TAs don't often have very high expectations of their students.

"The thing that really hooked me on this university was when an instructor took me seriously," said one undergraduate. "When I went to my instructor and said I wanted to do some research with him, he didn't say 'Read these books and get back to me,' Or 'This is the way the subject should be approached.' Instead he said 'Go do some research and then tell me what are the best background books on the subject, and tell me how you think the subject should be approached.' I liked being challenged and that he cared, in a professional way. He wasn't being condescending; he wanted good results."

Many undergraduates like to be challenged by their TAs. It's easy to think this is not the case when, as one TA said, "Eighty percent of the questions my students ask are about grades and tests," but if the TA can create an atmosphere where students feel their viewpoints are taken seriously and the class is (collectively) pursuing that ephemeral thing called "knowledge," the results can be surprising and gratifying.

"I like a TA who makes it feel like we're all colleagues studying together," said one undergraduate. "In this situation, there won't be power plays, there won't be TAs trying to delegitimize what students say. Instead, there will be a collective responsibility to find something out, to get somewhere."

Favoritism and Fairness

Undergraduates find that what a TA earlier called "the petty exercise of power" usually involves grades. Despite a TA's best attempts to keep grading objective, every grade contains an element of arbitrariness. However, because they see it as a direct attack on their authority, some TAs bristle and get defensive when a student questions a grade.

Because students aren't able to see how grading decisions are made and their questions are often coolly rebuffed, they think of TAs as playing favorites, and "brown-nosing" becomes the only avenue to a good grade. "It's difficult to get good grades," one undergraduate said, "while still preserving your dignity."

"Favoritism is really annoying," said one undergraduate. "It makes you feel like an underdog. It seems the only way to get ahead is

to play-up to the TA and who wants to do that?"

Undergraduates have mixed feelings on how informal they like relations between them and their TA to be. One undergraduate said she liked meeting her TAs outside class. "It helps me develop a good working rapport with my TA," she said. "I always like it when my TA holds office hours in a cafe, or at home. It shows an interest in the students' lifestyle." Another undergraduate said: "I always try to maintain a little distance from my TA." She said becoming the TA's friend can cause her to take advantage of the TA's friendship. "In a way, it co-ops criticism," said another undergraduate. "Who wants to criticize their friend?" Beyond being aware of this problem, TAs who prefer a less formal manner of interacting with their students should make sure that this informality is not alienating anyone—particularly, shy students. If students are not coming to see you in office hours or seem uncomfortable speaking with you, you should inquire as to the problem and make special provisions to accomodate them.

Clarifying Roles

Some undergraduates find it helpful for the TA to outline his or her role right off the bat. "I think it's important for an instructor to say: 'This is my role, this is your role,' " said one undergraduate. Such early role clarification will make students aware of the power relationship and division of labor in the classroom—allowing them to understand their responsibilities and yours. Many students find it useful for their TAs to clarify their standards and expectations directly, early in the semester, and preferably in writing.

Students generally appreciate it when TAs through questions and comments help give structure and direction to the class discussion. There is no end to undergraduate complaints about TAs who allow their classes to degenerate into aimless rap sessions. "I had a TA who would start the session by saying: 'Let's hear your views of the lecture today.' Everybody just spewed nonsense. It was their chance to try to impress the TA. They should have just said 'Please give me an A' because that's what they really wanted. I appreciate more structure, otherwise it becomes a brown-nosing session."

In the beginning of the semester, a TA has to decide where his or her teaching efforts will be most effective. A completely open, collaborative relationship may lead to a stituation where only the brightest and most motivated students participate. Conversely, if a TA rides close herd on the students, the least motivated group may learn more, but the brightest and most confident students will be turned off.

"You have to decide where your shots will be most valuable," advised one TA. You should allow for as much student imput as possible, he said, without allowing the class to stagnate or be dominated by a few vociferous students.

Listening to Student Criticisms

Other than the year-end departmental evaluation questionaires students fill out, few formal channels exist for undergraduates to comment on a TA's performance. None of the undergraduates interviewed for this article could remember ever being asked by a TA to evaluate his or her performance.

All, however, said they would have appreciated a chance to influence the TA's style, and in the humanities, where courses aren't so tightly structured by the department, the content and direction in which the TA was steering the class. One U.C. Berkeley history TA said he always has his students evaluate his performance and comment on the outline and reading materials for the course around the second or third week of class, a point early enough in the semester that changes can be made. As a result of this practice, he said, his students are more motivated, because they share responsibility for the class, and he learns something about which teaching techniques are effective, and which are not.

—David Pickell

Education and Social Responsibility

Education serves not only to impart skills and knowledge, but also to transmit values. As educators we play an important role in the formation of our students' values, for education functions as an agent of socialization in all societies. The values transmitted are most often determined by those who control the educational institution: the church, a community organization, or the state.

"Value-Free" Education?

Recognition of education's role in cultivating values should not alarm most TAs. After having undergone years of formal education, it should be relatively easy to reflect upon your own educational experience and recall the types of

values you were taught and how they were taught to you.

Often values are taught explicitly as a part of regular classroom instruction. This is done most blatantly in social studies classes, where obvious bias often exists in historical accounts. The values may also be integrated into school rules and guidelines. It is common to find a subtly taught "hidden curriculum" which works to reinforce certain types of behavior and personality traits, including orderliness, competitiveness, obedience, patriotism, and punctuality.

Since education is not "value-free" or neutral, it is especially important that TAs become conscious of the overt and underlying values for which they are expected to serve as conduits.

Even at the university level, education serves as a means of socializing young people. Although students' basic values have already developed by the time they enter college, the university experience often causes them to reconsider their values and think critically about what they have been taught to believe.

Political Choices in the Classroom

A choice TAs face as educators is whether to encourage students to engage in critical evaluation of their values and the material presented in class, or—either actively or passively—to influence their students to accept the ideas and values that are presented to them in the university. Opting for the latter is easy. All it involves is following the material outlined in the syllabus and adhering to the direction of the professor. Choosing to do the former is more challenging.

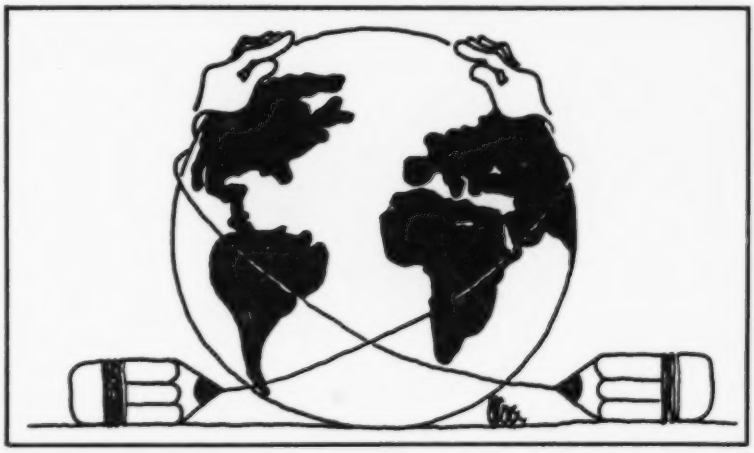
Certainly a TA would not want to approach students who have experienced years of socialization in the schools with counter-brainwashing techniques or blatant indoctrination. Not only would that be ethically objectionable, but such a method would very likely be totally rejected by undergraduates. Our goal as educators should be not to replace one set of values with another, but rather to get students to think critically about the values they hold so they can then decide whether to maintain or discard them.

One way to encourage students to be critical is to play the devil's advocate. Try to help your students identify the values presented in their textbooks and lectures. If these sources are liberal, you may want to pose questions in your section from a conservative standpoint, and vice versa.

Many students are simply unaccustomed to the idea that the "authorities" can be just as biased as individuals. If students feel insecure in their own knowledge, they often won't dare to voice their questions and objections, and it will take some prodding on your part to get them to do this.

Problem Posing

In recent years educators have been experimenting with various educational methods that encourage critical thinking and curiosity. One popular approach is called "problem posing." This method evolved from the work of Paulo Freire, a Brazilian educator and author of *Pedagogy of the Oppressed*, a treatise on how to



encourage critical thinking among adult illiterates.

The method involves the use of questions in presenting material to students. Rather than merely putting out information which students are expected to absorb and retain, problem posing education emphasizes critical evaluation of information and issues through the use of thought-provoking questions. Unlike the Socratic method of answering a question with another question, the problem posing method presents issues as problems in need of solutions.

Application of this method in your section will undoubtedly vary greatly between disciplines. At the minimum though, it would involve the following:

- Making the connection between the course material and larger social and political issues.
- Encouraging students to analyze the causes and events or the reasons behind a particular political perspective or policy.
- Consistently integrating into the section questions regarding values.

This should be done in a way that does not detract from teaching the course material. Doing all of this requires a good deal of

creativity and extra work. Things can be made easier if TAs within the same department work together in devising effective teaching strategies. The TA Training Project can also help in providing a network for TAs with similar educational interests.

Still, questions concerning how social issues and value orientation can be tied into regular instruction are secondary to the point that such a process needs to take place. The fact remains that whether we consciously choose to address value issues or not, our instruction will play a part in the larger socialization process of the University.

We have to decide whether our teaching should reinforce mainstream values and ideas, or whether we should encourage students to question the dominant point of view and, when necessary, "swim against the mainstream." The answer to that question is by no means a matter to be taken lightly.

—Pedro Noguera

TAing in the 1980s

In our years working as teaching assistants, we have been struck by changes we have observed in the students who come to our classes. We have heard TAs and faculty members who note these same changes complain about prevailing cynicism, disinterest or careerism. Frequently such complaints are accompanied by references to "the good old days" when students were more critical and demanding of their instructors, and less anxious about conforming to the strictures of society as a whole. These developments have prompted us to think about today's students and about our attitudes towards them.

The differences in social and academic context between the sixties and early seventies and the eighties is striking. Ten years of recession, massive transformations of the global economy, and an ever diminishing standard of living have effectively undercut the optimistic outlook of earlier years, while a resurgence of economic individualism coupled with political conformity has emerged as the dominant response to increasingly hard times. Paradoxically, the recession of the seventies and eighties has revived the social attitudes of the prosperous forties and fifties. Not surprisingly, the contradiction between the two has profoundly affected the outlook of today's undergraduate. In this context, students' cynicism is not only understandable, it might even be considered appropriate. It simply reflects an inability to cope with problems to which so-called experts cannot provide solutions, as well as the absence of a viable alternative response to the existing state of affairs.

A New Generation

The dramatic shift in the range of political, social and environmental problems of the last decade points to a single inescapable conclusion: our old attitudes and assumptions about the nature and function of the educational experience are no longer relevant to a "new generation" ignorant of the premises of our understanding and analysis. If we want to be heard by today's students, we must address their concerns. We must seek to make relevant the class material we present in terms of *their* reality. If students are perplexed by our propositions, if they are bored by the class material, or disinterested in the questions we raise, we must ask ourselves whether we are unthinkingly proceeding from our own understanding and concerns rather than theirs. If this is the case, and we feel that it is, every effort must be made to find some point of contact, to establish dialogue in place of dictation. Sometimes this can be accomplished simply by opening up a general discussion of the problem at the initial section meeting. More likely, it will require constant attention and sensitivity on the part of the instructor even at the expense of the quantity of material covered.

Defensive Cynicism

We have found that students' "cynicism" is in many cases a kind of defensiveness which can take two forms of intellectual expression. In the first, students will admit to a relativism that can be quite disheartening. It takes the form not of traditional questions such as "How do I know what is true?" or "Why is one truth better than another?" but of a more disturbing one, "What does it matter what I think?" In the second, students nonetheless evince a longing for authoritative, i.e. believable, statements and positions. Both of these tendencies will often exist in the same classroom, sometimes in the same individuals. This leaves you, the TA (whose authority is in any case ambivalent), with a predicament: to the extent that you make an effort to undermine their dependence upon authoritative views and statements, you re-

inforce students' relativism. To the extent that you attempt to counteract their relativism by presenting a vigorous, positive alternative view, you fuel their tendency to submit uncritically to authority.

Obviously, there is no easy way to resolve the problem; suggestions on how to make skepticism and cynicism productive cannot be made abstractly. A first step toward developing your own solutions, however, is the recognition that these positions do not necessarily indicate resignation or disinterest on the part of the students, but rather bewilderment and even resentment. Students' "apolitical attitudes," when viewed in this context, do not simply indicate a falling away from a period of political enthusiasm. They indicate a deep distrust of slogans and easy answers and an equally powerful fear that there may be no answers.

Rising Careerism

We see the pervasive complaints about students' "careerism" in much these same terms. A single-minded focus on their goals and careers often leads students to take a kind of consumerist attitude toward their education, which is anathema to our conception of a liberal arts education. Yet such an attitude makes sense when put in the context of the lives and choices of today's undergraduates. The soaring cost of education makes it increasingly difficult to treat college years as a transition period between adolescence and adulthood. This ideal (was it ever a reality?) permitted experimentation and wide-ranging interests simply impossible for today's students, who are under intense and unremitting pressure to be among the decreasing numbers of those who "make it" in today's world. The constant admonitions of authority figures at home, at school, and beyond push young people to unprecedented efforts to succeed in a work-world characterized by a vicious scissors of decreasing options and increasing expectations. Another source of painful disaffection is the return of the ideology of the 1950s, which equates conformity and success and trumpets the elimination of social problems and economic hardship—making a cruel mockery of students' attempts actually to live the "American Dream." While such pressures increase, the sources of social support for a broad humanistic education dwindle. Not only is the financial support available to students declining, but they increasingly find their progress measured in terms of cost-benefit analysis: what position does your education give you in the career hierarchy?

On Making Education "Relevant"

It is essential that these changes in the student world be reflected in the direction and content of their education. Teaching assistants must be sensitive to the real urgency and pressure that students feel and express more or less articulately. The pressure on today's student translates into an increasingly critical demand for instruction that is, as we used to say, "relevant." It is not at all unlikely, given the deep discontent which underlies the indifference and conformity of today's students, that

Do not overestimate what they already know.

their demands for "immediate usefulness" might be used as a critical point of entry into their world, the point at which to engage and challenge their perceptions. The problem might be best confronted directly, preferably on simple, clear-cut, moral grounds: why do students submit to such conditions and why should they? The recent protests against the investments of the University of California in South Africa indicate the presence of a strong moral sensibility on the part of at least a certain segment of the Berkeley student body. Shouldn't it be possible to connect this moral sensibility to their own circumstances? Knowledge, if not power itself, it the essential first step out of powerlessness. Who knows what effect it might have if vigorously applied to today's complacent undergraduates?

We would like to conclude with a few practical "dos and don'ts" for the sections themselves. Most subtle, but arguably most important, is the attitude you as a TA project to the students. Neither the "tyrant" nor the "prophet" personas are likely to bring about an open-ended exchange of views about sensitive values or deeply felt convictions. If it is at all appropriate, you can begin the term with a discussion relating to the general discipline of the course and express your attitudes regarding it and why you are there as a graduate student. Students should be

encouraged to provide their views and objectives as well, and these quite possibly will pinpoint important differences and generate discussions of them. The TA should carefully note these differences and return to them throughout the term.

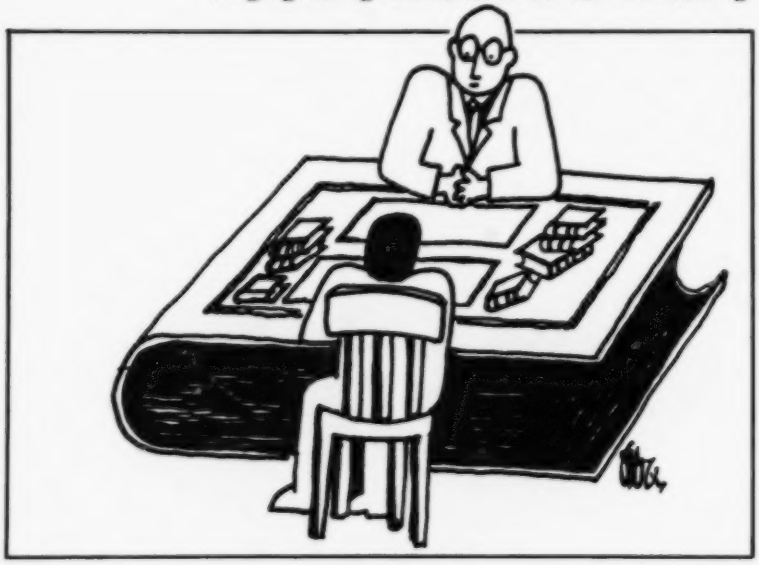
On a day-to-day basis, our experience has been that questions work better than declarations on sensitive subjects, although the reverse is true for non-controversial material. The change of pace necessary to achieve both one-way communication and open-ended debate is a delicate matter but it is greatly facilitated by TA preparation and attention. In every section there will be some balance between the few students favorably disposed to critical inquiry and the few with strong feelings against it. In between, most likely, will be the majority—and it is these that you are trying to reach. Great care must be taken to get this "silent majority" involved and avoid having the favorable minority simply parrot the TA's views. Playing "devil's advocate" is a particularly appropriate technique for undercutting uncritical agreement, while honest questions accomplish the same effect with uncritical opposition. In all cases, of course, you should avoid baiting and sarcasm.

The TA should be neither a "gloom and doom" type, nor expect students to warm up to the notion of self-martyrdom in defense of the TA's convictions. If we can foster a critical attitude on the part of today's students, we will have made the essential step in combatting defensive cynicism and aggressive careerism.

—Christine Schoefer and Robert Resch

TA/Faculty Relations

The role TAs play as intermediaries between students and faculty members is a crucial link in the educational process at Berkeley, but can also generate problems. In the worst case, TAs may be called upon to play the "bad cop" for the supervising faculty—enforcing the excessively tough grading standards or unrealistic reading



requirements imposed by the professor. Conversely, the TA may have to be the bearer of bad tidings to faculty members from students who find the lectures incomprehensible or boring. Many TAs never encounter such problems; but since this three-tiered relationship is complex, it is good to be aware of potential hazards and means of averting them.

TA-Faculty Communication

Probably the surest way to avoid TA-faculty friction is to establish a pattern of clear and continuous communication between you and your supervising professor. This is best accomplished through frequent TA-faculty meetings. The first such meeting should occur before the semester begins. Here the TAs and the faculty member should establish an agreement—an unwritten contract indicating the responsibilities each has for teaching and administering the course. Thereafter these TA-faculty meetings should become a forum for discussing what is wrong with the course, what is right with it, and why.

These meetings, and interaction between TAs and professors generally, should be as honest and diplomatic as possible. If students are on the verge of rebelling over impossible exams or incoherent lectures, an honest TA-faculty relationship will allow the professors to learn the truth from TAs and to make the necessary instructional changes. However, professors, like anyone, can be hurt by tactlessness. Criticism made in a sarcastic fashion is counterproductive; it will make the professor defensive, create unnecessary tension, and discourage TA-faculty dialogue. Just as when making comments to students, TAs should temper (and probably preface) helpful criticisms with some positive reinforcement.

Grading Conflicts

Grading is another sensitive issue which can complicate the TA-professor relationship. If not careful, a TA may encounter an aggrieved student playing the professor off against the TA in a complaint over grades. This type of problem can be avoided if the TAs and professor meet before an exam or paper has been graded to establish some standards and ensure as much uniformity as possible. This will minimize student complaints by helping prevent situations such as when one student receives a much lower grade than another student in a different section who copied his or her paper. It is also helpful if the TAs and the professor establish a definite procedure by which students can appeal their grades. Most TAs prefer that this procedure (which should be announced to the class at the beginning of the semester) specify that students first appeal to the TA. If the students are still dissatisfied they can then appeal to the professor.

TAs can avoid potential conflicts with their professors by discussing with them their ideas concerning the integration of material from the lectures and discussion sections. Here you should inquire as to how the professor feels about having his or her lectures criticized in section. Most professors welcome the airing of such dissenting view and want their TAs to do more than parrot the lectures. But it is important to be clear on this point so that the professor will not feel that TAs are inappropriately undermining his or her authority.

TA Evaluations

When the course is over the supervising faculty member should (though in my experience few actually do) write evaluations of the TA's performance. These evaluations are based on several sources of information, the most important of which are faculty observations of TAs in section and the written evaluations of TAs by their students.

Not all professors visit sections, but some do. In order to avoid being surprised, TAs might ask the professor whether he or she intends to drop in, and if so, when. This will allow you to prepare and to alert your students so that they don't suddenly clam up when the professor walks in. In the past I have invited professors to attend and encouraged them to participate in the discussion. This allows students to meet their professor and gives the professor an opportunity to see you in action.

Faculty also base their evaluations of TAs on the criticisms of them written by their students. Hence it is best if these student evaluations are thorough. I usually ask my students to comment specifically on my pedagogical strategies, whether or not they succeeded, and what could be done to improve them. This may sound unnecessary, but if you don't ask them to speak about these matters you may find that students spend most of their time evaluating your clothing, haircut, bad breath, and the like. These evaluations give the faculty some concrete evidence on which to base their comments and provide you with helpful suggestions about ways to improve your teaching.

—Greg Schultz

Special Problems

Teaching at Berkeley is generally a rewarding experience. Most of your students will be smart, ambitious, and hard working. Discussions in class will be conducted on an elevated plane. But because of the pressure of undergraduate life, personality quirks, and the like, most TAs can expect to confront some of the following problems during their careers as instructors.

Difficult Students

Most TAs sooner or later will encounter the consummate obnoxious student. This student may do a number of things to rankle you and to disrupt class. Some students are rude to their classmates or to the TA; others simply like to monopolize class discussion.

There are several ways of dealing with such students. First you should consult with the professor or with other TAs who have taught before. Then you might ask to see the offending student after class. If the student is monopolizing discussion because he or she is particularly bright, then you might reassure the student that you recognize his or her intelligence and that you appreciate such active participation in class; at the same time persuade the student to allow others to get a word in edgewise. If one student dominates class discussion regularly, consider calling directly on some other students to answer your questions. You should not always call on the first student whose hand goes up. Slower or more diffident students should be given a chance.

TAs also ought to use their authority to prevent any one student from persistently interrupting classmates or from insulting them. Generally it is a good idea to try to generate a lively debate or dialogue in section. Occasionally such debates, especially if they relate to contemporary policy or social matters, can get heated. The TA should make every effort to ensure that each student is afforded equal time and is not interrupted in the middle of a statement. Make it clear that volume is no substitute for reason. If students start to shout, the TA ought to intervene immediately to restore an atmosphere conducive to learning. The TA must make sure that a lively debate does not degenerate into a vituperative personal battle between students. Personal epithets, and even the most subtle sexist, racist, xenophobic, or homophobic comments, should not be tolerated. If you think that such a comment was made out of naivete, then correct the student gently; if the comment was made maliciously, use sterner methods to demonstrate unequivocally that such behavior is intolerable.

Loud But Unprepared Students

At some time or other you are likely to have students who come to class unprepared but try to bluff their way through section. Such students may get the discussion off track by drawing in irrelevant material. They tend to compensate for being unprepared by being loud. They like to talk about what they are learning in their other classes, which tends to sidetrack your section.

There are a number of ways of dealing with such students. You might ask them to apply the course material specifically to the point they are making, that is, ask them to give examples from the assigned readings. If they are unable to do so, ask whether they have indeed done the reading. If such students have not done the reading, you might ask them to see you after class. Avoid reprimanding students in class, for it may put a damper on future class discussions. Explain that you want them to participate but that if they speak off the top of their heads they will get the class off track; try to persuade them to stick to the class material during section. If the students to whom you have spoken continue to disrupt discussions, then as a last resort you might try to silence them in class: point out that their remarks contradict the assigned readings or that they are inconsistent with the lectures. This might embarrass students a little, but it will get the point across. Most students in the class will appreciate your efforts to maintain structure in the classroom. They resent it when aggressive-but-uninformed students are allowed to dominate class discussion and especially when someone gets section discussion completely lost.

Attentiveness in the Classroom

Explain to students on the first day that you expect their undivided attention during class. Urge them to respect their peers when they are speaking during class. Students occasionally disrupt class discussion by having separate conversations, giggling, passing notes, doing other work, reading a newspaper, etc. You might first try frowning at the offending students to make it clear that you disapprove. If students persist in disruptive behavior, then you should verbally request that they desist or that they see you after class—the latter is in some ways better since it will avoid humiliating them in class. In your meeting with the student explain that it is disrespectful to ignore or disrupt fellow students. You might also ask students who are talking or doing other work during class to answer a question about the material the class has just discussed. This may embarrass them a little, but it will get their attention. Many TAs understandably feel uncomfortable policing the classroom like this. But in real classroom situations you will sometimes face a choice between asserting your authority and letting disruptive students undermine the learning process. The former is clearly the better option.

Attendance

You are likely to run up against a number of students who do not attend class regularly. If section attendance is required, then you can expect to receive a number of extraordinary excuses from students as to why they could not make class. It is usually advisable to make it clear early on to all students that they must attend section or lab. Spell out to them the consequences of absences. Some TAs like to explain to students that section is worth a specific percentage of their final grade and that if they miss a certain number of sections then they cannot possibly get above a designated grade; for example, if students miss more than 3 labs or sections during the 15-week semester, then they have in fact sacrificed 1/5 of the class grade. They cannot possibly get above a B for class participation if they miss 20 percent of the classes during the semester.

Indicate to students early in the semester that you and the professor insist on attendance and that you do not condone lateness to class. You may want to pass around a roll sign-up sheet during every section to demonstrate to students that you are keeping track of who does or does

not come to class. Of course, many students have legitimate excuses to explain why they could not come to class. These should be respected. But students who invoke the Big Game, Rush Week, or another such excuse should be made to recognize your professional obligation to maintain grading equity.

Late Work

Late work is often a tricky subject. Sometimes students have good explanations why they could not get their work in on time. Many students, perhaps because of the vagaries of their semesters, may have three or four exams or papers due at the same time. Others may experience a family or personal crisis. It is important to take such problems seriously. If it does not violate the policy of the professor in charge of the course, then give students who have legitimate excuses extensions on their work.

But it is equally important not to be too generous with such extensions. Do not set a due date only to give extensions to half of the class. The students who get the assignment in on time will resent you for it and will begin to think that your grading is unfair. To head off excessive requests for extensions, many TAs find it useful early in the semester to announce to their classes that late work will be penalized.

TAs also ought to be aware that it is not always a good idea to give extensions to students who experience writer's block. Too often an extension simply allows them to avoid committing pen to paper; writer's block may result from the student's desire to produce a perfect paper. TAs should encourage such students to finish their research and get down to writing. Try to convince them that almost by definition college papers are not perfect works of art. It is very important to set deadlines for students experiencing writer's block. Do not let them procrastinate or over-research their topics.

Grade Conflicts

Nearly every TA at one time or another will have to deal with students who are extremely unhappy with the grade assigned to their work. Many students have their egos so tied to their school work that a relatively low grade becomes a blow to their self-esteem. Others are under intense pressure to perform well in order to be admitted to law school, the business major, etc. As a result, debates with students over grades can often become unpleasant.

There are a number of ways to help minimize "grade mongering." Explain to your students at the very beginning of the semester that your role is to evaluate their ability to learn and apply course material. Make it clear to them that you are not judging them as human beings and that the same standards apply to everyone in the class. Often students will try to pressure their TAs by telling them they always get A's or that they need to get an A in this class in order to get into medical school. Firmly explain to such students that their aspirations or previous academic performance in no way affect your grading policy and that it is not your responsibility to see that they get into the medical school of their choice. Make it clear to students that you will not be swayed by such pressure. This will help minimize frivolous grade complaints. But avoid intimidating students into thinking that they have no right to appeal their grades—often their complaints about grades are legitimate. When you hand back graded work, explain to them the procedure for appealing a grade. And make sure to treat any such complaints with an open mind.

Every class has a problem student.

Grade disputes are sometimes charged with emotion. In a few cases, students who associate their self-worth with their grades may become distraught and begin to cry when they come to discuss their grades with you. Obviously, it is important first to try to calm them down; then explain to them that the grade you assigned their work, though perhaps lower than they hoped for, should in no way be interpreted as a sign that they are incapable of learning. Convince such students to strive for improvement; reassure them that they are intelligent and capable.

Another way to help prevent students from interpreting low grades as a personal attack on them is to be sure that your written comments on their work point out not only the bad, but also the good. If you only point out the problems, then students are likely to think that they have nothing valuable to say. Preface your negative criticisms with comments on the paper's strengths. Then explain the weaknesses and tell

students exactly how they can correct their mistakes so that they know how to improve. You also might try to keep you remarks impersonal. That is, instead of saying "*You* misinterpret this problem here" or "*You* have not analyzed the question very thoroughly," write that "The *paper* misinterprets . . ." This will help ensure that students do not feel personally attacked by your written comments.

In a few cases students may be belligerent in grade disputes. (While belligerence is not limited to one gender, male students tend to be more aggressive, especially if their TA is a woman.) If students approach you with grade disputes but are unwilling to accept your explanation of their grades, then you should tell them that you will have either another TA or the professor read the work. You might also tell students that it is their prerogative to take the work directly to the professor for a separate opinion. Indicate to belligerent students that you will not be browbeaten into giving them the grade of their choice and that the grades must be based on your objective, professional evaluation of their work.

Flirtation, Familiarity, and Favoritism

You can also help minimize grade disputes by making it clear to students that you treat everyone equally. This may sound self-evident, but it is really not so simple. Many TAs want desperately to be liked by their students and will go to great lengths to be friendly, especially since they know that their students will write evaluations of them at the end of the semester. But friendliness has it drawbacks. If some students perceive that you are especially friendly to other members of the class, then they are likely to assume that you will not grade objectively. Carefully evaluate the social distance that you establish and maintain between yourself and your students: are you equally friendly and accessible to all students?

Make sure not to get too personally involved with your students. Do not become conspicuously friendly with certain people. Even more important, do not get romantically involved with any student during the period when he or she is in your class. The reasons for this are obvious. Moreover, because of the nature of power relations in the classroom, a fine line distinguishes romance from sexual harassment, the latter of which is specifically forbidden by University regulations and public law. If an irrepressible romance does develop, then it is best to ask the student to move to another section or lab. This will help ensure objectivity in grading; it will also convince your students that you do not play favorites.

—Greg Schultz

Dealing with Language Problems

U.C. Berkeley is known the world over as a center of study and research, and many foreign students attend classes on this campus. Although they pass an English examination prior to their enrollment, usually their English will not reach the level of an average American student. I myself, being a foreign student whose first language is not English, faced many language difficulties, especially in my first year at Berkeley. The foreign students who attended my class experienced similar hardships. Certainly, the main function of most teachers is not to teach students the English language, but a little attention to this particular problem on the TA's part can help foreign students in their studies.

Overcoming Language Barriers

TAs should always inquire in the first class session if some of the students have difficulties in English. Such a direct question will encourage foreign students to discuss their language problems with you, and it demonstrates to all the students and to the foreign students in particular that you are aware of this specific problem and will try to cope with it.

Invite any foreign students in your class to an informal meeting during office hours. In this meeting you can learn about the student's language background and identify more specific language difficulties such as accent, spelling, vocabulary, or comprehension. You can also familiarize yourself with cultural factors that may affect students' performance. For example, many foreign students know only the metric system; it is hard at the beginning for them to conceptualize the different American measuring system. Others are used to submitting papers written in their own handwriting and have never typed before. Such apparently trivial problems may influence the performance of students in class and it is helpful to discuss them individually.

Accent Problems

Many students whose first language is not

English experience problems because of their accents. In a class based upon students' verbal participation, heavy accents may prevent students from contributing to the class discussion and may consequently affect their grades. Accents don't usually change much even when foreign students improve their English skills. Certainly, TAs cannot correct accents, but they can encourage students to participate and help them with their efforts to express themselves.

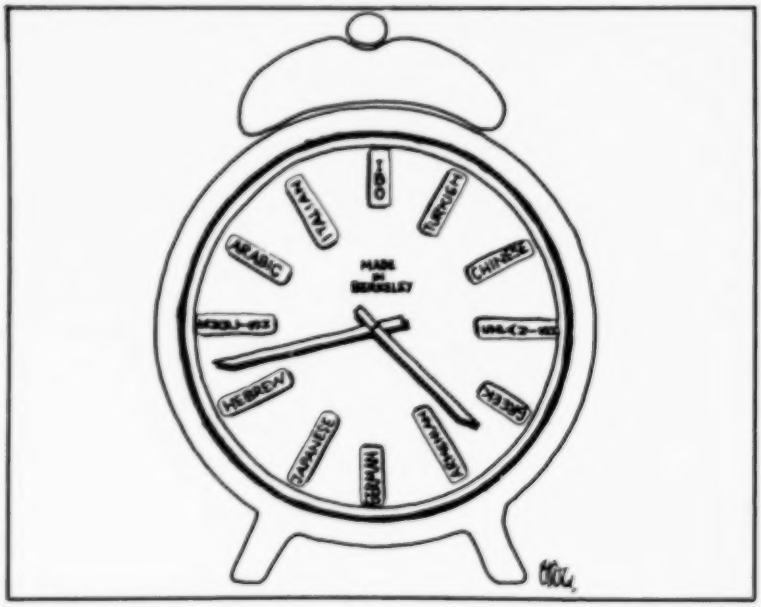
One simple way is to repeat the student's main argument. If you do not fully understand the argument, you should say so openly. One of the most frustrating experiences of foreign students is to talk without any reaction. Many students, out of politeness or indifference or a fear of embarrassing their classmate, prefer to remain calm and to give the impression that they understand. It is thus the TAs role to ask for further explanation. It is also useful to correct the expressions that may help the foreign student in the future.

Although accents rarely change, foreign pronunciation can become clearer to Americans if the speaker can identify his or her specific difficulties. In extreme cases, when you feel that a student's accent is incomprehensible, you can suggest ways of improvement, such as learning a phonetic alphabet or attending a language laboratory.

Special Writing Problems

Most foreign students have passable English. They understand the lectures and comprehend the reading material. Their main hardships come when they use this language actively in talking and especially in writing. In science, where language is mostly confined to basic formulas and universal signs, this problem seems less acute than in the humanities and social sciences. When the course requires extensive written work, like essay exams or term papers, the foreign student faces a real disadvantage.

You cannot and should not exempt such students from these assignments, but there are ways of helping foreign students. If the midterm and final exams are taken in class, you have only limited devices, such as giving some extra time to the foreign students or allowing them to bring a dictionary to the examination. If some of the assignments are take-home exams or term papers, the TA together with the student can ease the burden of language. You can ask for a volunteer among the American students who will read the paper and will



correct grammar, spelling, and style. Many foreign students will themselves ask some of their American friends to help even without the TAs intervention. But others may avoid such a request and therefore it is appropriate to ask them if some friend will correct their papers and, if not, to ask another student to act as a tutor. You should read both versions of the paper and give further comments on the grammar and writing style.

As a general rule, all TAs need to be aware that they may have a foreign student in class whose first language is not English. Showing concern and awareness about the students' specific language difficulties will aid their overall performance in the class.

—Eyal Naveh

Advice to Foreign TAs

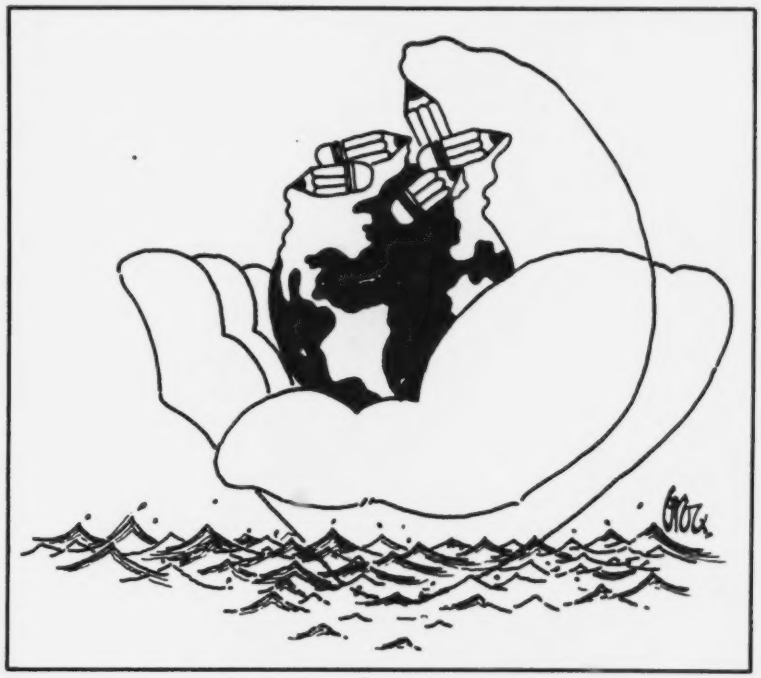
The trials and tribulations of foreign TAs do not differ substantially from those of our American counterparts. We too search frantically for ways of motivating the jaded senior or the petrified first-year student. We too face the recurring nightmare of having to spend two long hours with a group of students who have not prepared their required readings or lab assignments. Yet in one crucial area, that of student-teacher communication, we are thrust

against a set of problems of our very own. Overcoming these communication obstacles, both in the verbal form as well as in the less tangible cultural forms, is the subject of this article.

Language Difficulties

The best possible practice is to confront your students immediately with the problems arising from language barriers. Advise your students to speak clearly and to avoid excessive or incomprehensible use of slang, and request them never to ignore any dense or incomprehensible sentence that you may utter. Encourage them not to be shy. This point is best conveyed to your students in a humorous, light-hearted fashion so as to encourage students to request language clarification freely ("Oh, my English is so terrible!").

No matter how hard you try, there will always be a small group of students who will attempt to shirk their responsibilities by laying the blame on your language difficulties ("I didn't understand you correctly. I thought you said NEXT week."). You can avoid this problem by flooding your students with written instructions. All



course requirements, the method used in computing the final grade, exam dates, and a thorough reading list should be presented in writing at the first possible opportunity. During the first few weeks TAs should hand out written study questions to familiarize students with the mode of questioning that they will be confronting during the course of the semester. Be forever attentive to students' facial expressions. Blank looks are a sure sign that something is going wrong. At times you may even request some of your more able students to paraphrase your more crucial thoughts in their own language.

Always attempt to divert attention from your mouth to some other object. Each week, you can require different students to lead part of the session, or you can break up discussion sections into small groups to generate more intense student participation. Occasionally you will find the use of audio-visual material invaluable. Slides, photographs, movies, or if it happens to suit your purpose, music, are often extremely effective ways to illustrate hard to explain points. As twentieth century America is, in essence, a visual culture, you will find that your students appreciate these methods.

Make personal use of audio-visual techniques. Try recording yourself on a video camera, or on an ordinary tape recorder. You will be surprised how many problems you can identify by watching or listening to yourself carefully.

Cultural Problems

Communication is not always a language problem—it has definite cultural dimensions. One common solution lies in the realm of intensive observation. Try auditing some undergraduate classes before taking on the burden of a TAship. This will familiarize you with the interaction between student and instructor. If possible you should hold a readership for at least one undergraduate course. This way you will know what level of preparation to expect from the average student.

The most fruitful way of overcoming the cultural barrier is to show your students that you care. At the earliest possible opportunity, get to know their names, where they come from, and the subjects that interest them. A few minutes of small talk before each session, ranging from movies to an analysis of baseball scores, can make a world of difference.

You may convey your interest in their academic welfare by being particularly responsive to their mundane needs. You may want to give out your home phone number. However, some TAs caution against doing this and some ask their students to use it only in an emergency. Be flexible with your office hours if students can't make the times you set. You might even require a mandatory one-on-one meeting with each of your students, provided they don't number in the hundreds and thousands. It goes without saying that your willingness to accommodate students should not compromise your firm demands for punctual assignments, nor

should it erode your strict but fair grading standards.

Always remember that California students are usually friendly and easy going. A warm manner and a good sense of humor are likely to overcome many a barrier between you and your students. But beware! Americans, like most other people, appreciate a good joke about somebody else. They do not enjoy being the target of humor. Sarcasm or any other form of belittling students should be avoided at all costs.

Body Language

A few tips of body language: American students expect you to look at them straight in the eye when addressing them. Avoid the stiff body and the "poker face." Facial expressions convey a sense of receptiveness, while a moderate waving of hands and arms serves to emphasize crucial features of your discourse. Touching, a common feature in many cultures, should be avoided.

Cultural obstacles may be overcome by showing your enthusiasm and by being attentive to the actions and reactions of your students.

—Ron Robin

Teaching Disabled Students

As teaching assistants you may find yourselves encountering, for the first time, many students with different experiences, backgrounds, lifestyles, and appearances. What you make of this contact is largely up to you. If you meet a student that you perceive as different and of whom you have already formed a preconceived idea, you may find yourself looking for signs in the student that will reinforce your stereotype. This approach will inhibit you from experiencing the student openly and without bias. You can learn a lot about yourself by noticing not only how you react to students that you perceive as different but also what barriers you may erect that keep you from getting to know the individual.

If you have a student with a disability in your class and you have had little contact with disabled people, you may feel anxious and apprehensive. Questions may arise such as, "How do I treat a person who is disabled?" "What do I have to watch not to say?" "Should I ask him or her about his or her disability?" Don't focus too much on the disability. Instead, realize that disabled students are individuals not unlike other students; concentrate more on discovering their abilities.

How Should I Act?

How do you treat a person who has a disability? Quite simply, the same way you treat any student: no better, no worse, with the same respect that you would expect for yourself. In class, maintain the same eye contact with a disabled student that you would with any student. Be alert to communication patterns and be sure the disabled student is given an equal chance to participate and be validated. Be careful not to overcompensate by making more physical contact (pats on shoulders, heads; leaning on part of a wheelchair) with these students than with others. Academically, hold the same expectations for all of your students, disabled or not, and recognize their individual strengths and weaknesses.

As far as what you can and cannot say to a disabled student, just use the same guidelines you would use for any student. Keep in mind that you don't want to say things that may be insulting, degrading, or patronizing to any of the students you work with. Sometimes vocabulary questions can be awkward. It is common for a blind person to say, "I saw the game last Saturday" or for a student in a wheelchair to say "I walked to the store." Vocabulary is one more thing we all have in common.

Should I Ask About a Disability?

When it comes to asking people about their disabilities, first stop and think about a few things. What are your motives for asking? Are you able to respect their right to prefer not to talk? On the question of motives, are you interested in this person and would you like to know more about his or her life as well as about the role disability plays in it? Do you want to know how the disability will affect classroom participation? Some people may talk in great detail about their disabilities; others may find it too personal or very boring. Many are somewhere in between. A choice not to respond to your questions should not be taken as an automatic indication that the person is bitter or resentful about his or her disability.

Disability is Important Only to the Observer

Through your experience as a teaching assistant working with students who have disabilities, you may come to see that a

disability is usually more important to the observer than it is to the disabled individual. Disabled people are more interested in getting on with their lives, work, and relationships. The problems lie in the attitudinal and architectural barriers that are found in society. Disabled individuals and "able-bodied" individuals have much more in common than many people think. An individual may have been able-bodied yesterday and disabled today. Disability does not discriminate and does not ask permission. It can happen at any time: at birth, because of a congenital condition, by accident, or through aging.

Possible Accommodations and Auxiliary Aids Needed

There are various types of disabilities, each unique in its own way. For some students, auxiliary aids and accommodations will be needed to maximize their own potential. The student is the best source of information on what may be needed. You may want to meet with disabled students at the beginning of the year to discuss their possible need for accommodations.

The following are a few suggestions of what a student with a particular disability may need in the way of accommodations or auxiliary aids but the list is by no means exhaustive.

A student with a hearing impairment or mild to moderate hearing loss may use a hearing aid, notetaker, or tape recorder. Moderately to profoundly deaf students may need a sign language interpreter and/or telecommunications devices. Other deaf students may read lips.

Students with speech impairments may use spelling or alphabet boards, printing devices, speaking machines or interpreters. Many students, though, prefer that you learn to understand their speech. This can be made easier by making sure there are no other distracting noises; have patience, concentrate, repeat words and sentences to make sure you understand, and ask students to repeat themselves if you don't understand. Don't pretend to understand if you don't.

Students who have a visual impairment or are blind may use notetakers, readers, secretaries, tape recorders or taped material.

Students with disabilities such as multiple sclerosis, muscular dystrophy, cerebral palsy, arthritis, and spinal cord injury may use letter boards, tape recorders, notetakers, etc. They may also need extended time to write tests or to take tests orally.

Another disability group is those with learning or perceptual disabilities. These students may also use tutors, readers, notetakers, tape recorders. They often request extended testing time. In order for you to get a better understanding of what it means to have a learning disability and what accommodations are needed, you can talk to the students and/or get in touch with the coordinator of services for learning disabled students at the Disabled Students' Program.

There are, of course, other disabilities than the ones that have been mentioned above. Some of them are hidden, like epilepsy and environmental disabilities. Whatever the case, working directly with the students is the best way to understand their needs. An added resource is the Disabled Students' Program (DSP) at 642-0518. Handouts are available for teaching assistants from DSP which describe in more detail some major disability categories (visual, hearing, orthopedic, learning, speech) and how they can be accommodated in the classroom. Feel free to request them at any time.

—Disabled Students' Program

Classroom Climate

National legislation has been passed to ensure equal rights for ethnic minorities, women, and disabled people, and attempts have been made to pass such legislation for gay men and lesbians. In response to this legislation, many universities have evaluated their policies and practices towards minority groups. Although legal regulations are important vehicles for fighting discrimination, more important to you as a TA is the atmosphere or climate of your class. A TA's position—somewhere between student and professor—is ambiguous by definition. Because TAs often feel so powerless in the teaching hierarchy, they tend to forget that in their students' eyes they are all-powerful. Obviously as a TA you should avoid making sexist or racist jokes or overtly disparaging remarks to or about your students. However, it is equally important that you be aware of the more subtle atmosphere of your class.

Instructors often inadvertently communicate to their students perceptions about appropriate ambitions, behavior, abilities, and goals which are based on stereotypes rather than on the TA's evaluation of individual students. These preconceptions may limit students' development by

discouraging participation in discussion, undermining their confidence and aspirations, encouraging them to drop or avoid certain classes and majors, or even to leave school. TAs should be aware that the subjects they are teaching may awaken feelings of insecurity or apprehension for certain students. The atmosphere a TA establishes can have a significant impact not only on students' experience in that class but also on the way students view their experience at the University. A TA who recognizes this can profoundly affect the intellectual and social development of minority and non-minority students alike.

In the Beginning

Class participation patterns are generally established during the first few weeks of class and can be difficult to alter once they are accepted. Pay special attention to patterns of participation during this time, and notice your own response to interaction between students.

- Although you want to encourage interaction between students, you should be aware of communication patterns, and be ready to intervene in patterns that exclude some students. For example, if male students pick up on each others' points but ignore an appropriate comment offered by a woman, you may need to slow the discussion and recognize the comment that was overlooked.
- Make eye contact with minority as well as non-minority students after asking a question to invite a response.
- Note patterns of interruption. Are minority students interrupted more often, either by you or by other students? Make a special effort to ensure that all students have the opportunity to finish their comments.
- Observe your own reactions to communication patterns. For example, do you discourage, ignore, or encourage offensive humor?

Call on students, at least during the first weeks, in order to ensure that all of them get used to speaking in class. It will also greatly help to schedule a short appointment with each of your students during your office hours to encourage them to express their ideas and interests verbally. This is the time when students who are shy about speaking in class will let you know. Be open to discussing ways to overcome this.

Establishing a Friendly Atmosphere

Establishing a classroom climate that is friendly and encourages all your students to participate is difficult simply because behavioral and communication patterns do not usually express blatant racism or sexism but rather more subtle and elusive beliefs. Although the class atmosphere cannot be only your responsibility, your reactions are especially important because your students perceive you as having so much power. These are some suggestions for establishing a good atmosphere:

Classroom climate.

- Ask minority and non-minority students qualitatively similar questions—critical and analytical as well as factual questions. Also, monitor the frequency of your interaction with students to ensure that you are giving students equal attention.
- Avoid asking questions in a way that unnecessarily singles out students who might not be adequately prepared. Questions like "Is there anyone who doesn't know what this means?" force students to humiliate themselves in order to acquire knowledge. A better approach is to ask, "Can anyone explain this problem to the class?" This tack gives positive reinforcement to those volunteering answers and avoids embarrassing students who can't answer your questions.
- List the names of students in your class. Do you know the names of fewer minority students in proportion to their number? Can you pronounce their names correctly? If you cannot, explain to your students that languages are not your strongest point; ask them to say their names slowly at the beginning of section and to be patient with you. Do not provide your students with nicknames that are easier for you to pronounce.

- When talking about occupations or professions in class discussion, use language that does not reinforce limited views of career choices for men, women, and minorities. Often examples can be effectively cast into the I/you form: "Suppose I am a doctor and you come to me because . . ." rather than "The woman went to the doctor and he told her . . ." Also, avoid placing professional women in a special category: Say "Melissa Smith was an accountant" rather than "Melissa Smith was a woman (or worse, lady) accountant." Many TAs emphasize gender and/or ethnicity, especially when discussing a profession in which minorities have been traditionally underrepresented.
- Avoid the generic "he" whenever possible.
- Do not assume that everyone in the class is heterosexual—you may embarrass yourself as well as your students.
- If you divide your class into small groups, split the noisiest, most confident students up. They may know what you're doing, but it doesn't matter—you might even want to talk to them about it and enlist their help in encouraging less confident students to participate.

You can ask your students to help you create a positive classroom climate. They should be mature enough to discuss sensitive issues and may welcome the chance to talk about a subject that is so often avoided. Speak with them about how they see the climate of your class. Notice when textbooks contain stereotypes, point them out, and give students the opportunity to discuss them. Do the same thing, in a calm and unaccusing way, when students verbalize stereotypes. Issues of climate and atmosphere are always complicated and subtle.

However, in literature, history, and social science classes, the TA's role is made more difficult by the kinds of topics covered in class. Depending on the professor's focus and on the reading list, you may need to make a special effort to bring up issues that are of particular interest to minority students and to encourage all students to discuss sensitive issues. But excessive and superficial concern about minorities and women can lead to a different kind of limitation. It is condescending to assume that all women students are authorities on—or even interested in—women's issues. Don't expect minority students to take the lead in discussions about historical or contemporary issues involving minorities, and don't assume that only minority students can or should discuss minority issues.

As a TA, especially in the social sciences or the humanities, you are likely to confront this dilemma: how to stimulate discussion on controversial minority issues—race, gender, etc.—without being patronizing. TAs cannot resolve this dilemma by ignoring these controversial issues; but a simple-minded forcing of these issues may prove overwhelming, inhibit class discussion, and embarrass the very students you were hoping to encourage.

—Lori Llewelyn and Beth Haiken

IV The Rating Game

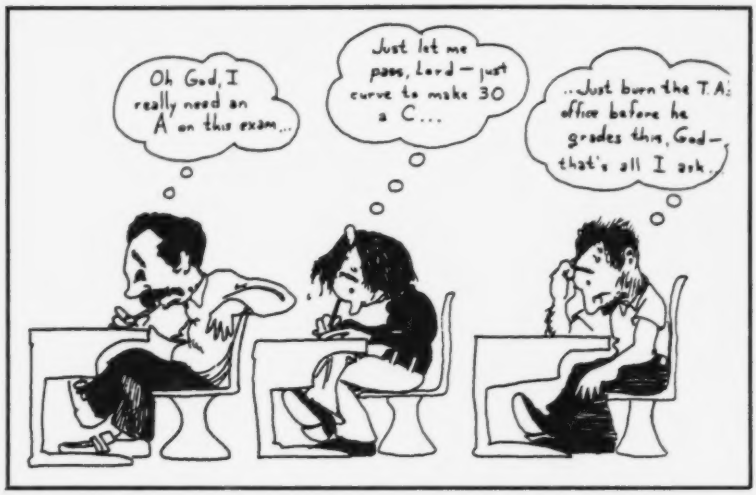
Most of the articles in this handbook have stressed that cultivating a good working relationship between the TA and his or her students is necessary if a good learning environment is to be created. But the task of establishing such a relationship is complicated by the obligation of TAs to evaluate and assign grades to students and by the reciprocal rating that goes on as students evaluate the performance of their TAs.

To understand the grading system's potential for disrupting educational progress, think of your own graduate career. How well do you think you would get along with your advisers if they suddenly began giving you "C"s on your seminar papers? Thus, as much as TAs may bemoan the excessive grade consciousness of their students, they should understand (since they too are students) that the undergraduate's sense of self-worth may be tied to his or her grades, and that the whole grading process should be handled with great sensitivity. It never hurts to be humane.

The articles in this section should orient TAs to the ABCs of grading and testing. The section also examines the rating game's other component, the evaluation of TAs by their students, and suggests how TAs might use this undergraduate feedback to sharpen their pedagogical skills.

Introduction to Grading

All of us who have read Pirsig's *Zen and the Art of Motorcycle Maintenance* smugly know that quality is as indispensable as it is indefinable in determining excellence. Yet one of our principal duties as TAs consists of assigning letter grades in accordance with university regulations set forth in the *General Catalog.* Although some disciplines proffer a definitive right versus a wrong answer, grading on the whole is tricky. What after all is fair at midnight, when your eyes are swimming and you have a dozen more papers to grade before dawn? The following points are designed to help you avoid common TA grading problems.


Oh God, I really need an A on this exam...
Just let me pass, Lord — just curve to make 30 a C...
...Just burn the T.A.'s office before he grades this, God — that's all I ask.

Remember, students treat their final grades with religious solemnity.

At the beginning of the semester, distribute in writing the objectives of the course, the weight of the assignments, of tests, and of class participation, and the penalties, if any, for late assignments. It is especially important to provide students with a written description of what is expected of them and how grading is done. If "improvement" counts, specifically indicate the way it counts. Throughout the term keep accurate, up-to-date records. If a student complains of unfair evaluation, check your work. Correct any errors by appropriate means. Remember, however, that after submitting the end-of-term report, you can change a grade *only* to correct a procedural or clerical error; reassessment of a student's work is an unacceptable reason. If your evaluation is correct, firmly state your position and reasons. The adamantly dissatisfied student then has the option to appeal to the supervising professor, chairperson of the department or to the ombudsperson.

Charting Grades

Charting the distribution of your grades provides another means of checking yourself. A fair scale reflects the entire range of grades with the bulk of students doing average work. If all of the students fail, something is clearly wrong in the evaluative process. It is useful to know that the final grades D, F, NP, or U allow the student to repeat the course; the initial grade stays on the record but the new grade replaces it in the student's GPA.

Hard work, enthusiasm, and politeness count but do no substitute for the quality of a student's work. A University degree certifies competency. Our responsibility is to effect this goal. Helping to write a student's paper or inadvertently feeding a student answers defeats the purpose. No one wants to be operated on by a doctor who got through medical school because he was "a real nice guy." When, however, a radical discrepancy occurs between in-class performance and the graded paper or exam, work closely with that student to try to uncover the problem.

Grading multiple choice or short answer examinations is relatively straightforward: standardize answers and assign numerical equivalencies. Before grading an essay examination, establish the components of a good answer. Meet with the instructors to compare standards if different sections take the same test.

—Nancy Ciccone

Grading Standards for Essay Exams

I usually provide my TAs with the following suggestions for grading students' essay exams:

First, I'd organize the exams by question, skimming through a number to get a "feel" for the range of responses, then going through more carefully to make comments. At this stage, I'd enter a tentative grade on a separate piece of paper, reserving final judgment until the last review. For the final check, I'd skim through by grade category to spot anomalies.

Comments should be thorough, objective, and impersonal: a simple "no" or "this is overstated"

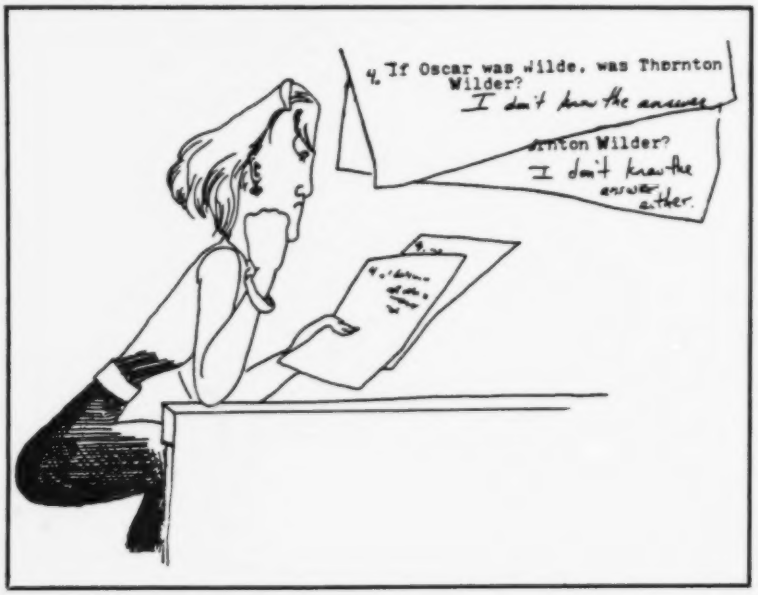
is better than "you ignorant fool!" or other personal remarks. You should make a short general statement at the end of the essay: e.g. "This shows that you have mastered a lot of information, but you have not quite responded to the questions," or, "Your argument is convincing, but the essay could have been more effectively organized and supported with more specific evidence." This helps explain the basis of the grade and will be helpful later if the student wishes to discuss the examination. You might identify the "best" exam on each question so that copies can be retained to show other students.

A-range: I like to be pretty conservative with A grades, a little more generous with A-. These essays and papers should be directly responsive to the main issues and the subtleties of the question posed. The argument should be clear, logically organized, and supported by well-chosen evidence. Usually it is not difficult to recognize stand-out essays.

B-range: These should also be responsive to the issues, though they may leave out some obvious elements or have some weaknesses in evidence or argument. Minor errors of fact, digressions from the topic, skimpiness of evidence (or exclusive reliance on a single lecture or reading), etc., will distinguish these from A-range essays.

C-range: These should show some command of the course materials, but they will probably lack focus and include materials not really relevant to the question. Partial treatment of the key issues, lack of organization, all facts and no argument, or all argument and no facts, major errors, etc., will characterized these exams.

D and below: Incoherence, minimal control of evidence, emphasis on ideas irrelevant to the question, etc., will make these as easily identifiable as the A-range essays.



Great minds are not the only ones that think alike.

Because my paper assignments for these courses are identical to the examination question, I ask TAs to weigh basically the same kinds of elements as on the exams: relevance, organization and effective support of the argument by specific examples. Because the examinations are written under time pressure, I usually advise the TAs to tolerate some lapses in form (spelling, grammar, etc.) if they do not seriously compromise the clarity of the argument. I do encourage the TAs to give more weight to such matters in assessing the papers.

—James Kettner

Grading Papers

Grading papers is a process distinct from grading essay exams. Generally more weight is placed on style or expression in the grading of papers. You cannot expect students working hastily during an hour-long examination to write stylistic masterpieces. Given adequate time to write a paper, however, students should be able to express themselves in well-conceived prose.

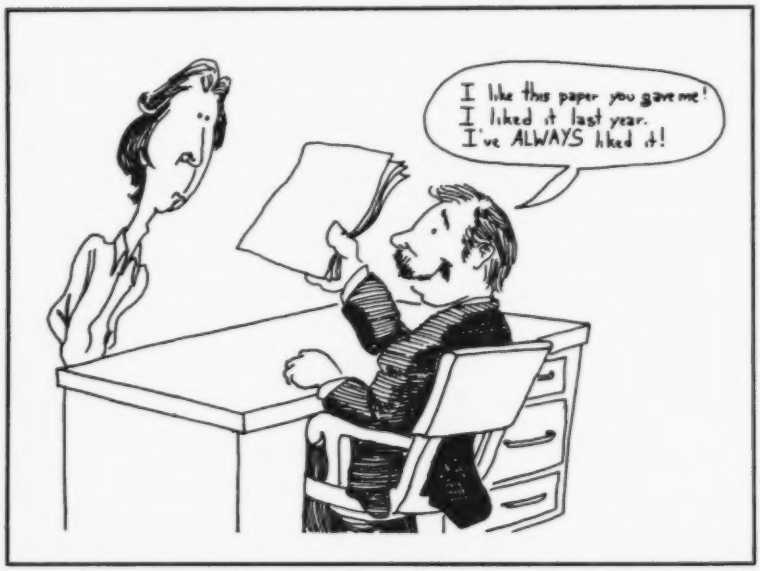
Style Versus Content

In some measure the distinction drawn between style or expression and content in a paper is specious. Imagine two papers, each addressing the same topic and adducing the same pieces of supporting evidence. One paper is well organized, tightly argued, and composed in straightforward, proper English. The second paper is desultory, largely ungrammatical, and written in pretentious (and frequently awkward or incorrect) prose. Even though the papers make essentially the same points, the former is clearly better. The TA does not have to read each sentence three times before the meaning begins to emerge; nor does the TA have to correct every other word. Expression and content are inseparably linked. It is often helpful to make this argument to students who come to you with the all-too-frequent complaint that

style should not be considered in grading because "This isn't an English class."

Writing Comments on Papers

The comments you write on students' papers should clearly indicate both the paper's weaknesses and ways in which it could have been improved. Ideally, comments should not only justify the grade assigned but also provide a recipe for future improvement. Commenting over-zealously is not always constructive. Although students appreciate specific comments, they may be overwhelmed if their paper is returned with more red ink than black type. You cannot correct years of bad training by commenting excessively on one paper. Instead, address the most basic problems of content and style or grammar and hope that in later papers the student will have overcome enough of these difficulties for you to focus on more subtle grammatical and stylistic problems.



Here are some more detailed suggestions for you to consider in commenting on students' papers.

- Comments fall into two categories: marginalia and end-notes. Marginalia generally should deal with specific problems of grammar, sentence and paragraph structure, or fact. End-notes should evaluate the overall presentation of the paper and should consider categories like content, style, and organization.
- If time permits, read through each paper twice. Make marginal comments the first time and compose the end-comments after the second reading. If you make interpretive comments on the first reading, you may find that students answer your initial criticisms later in the paper.
- To develop reasonable grading standards some TAs begin the grading process by assigning tentative grades (i.e., in pencil) to the first five or six papers. This allows them to get a sense of the range in the quality of students' responses before assigning final grades, and helps TAs to define their grading categories. What in this particular assignment should an A, B, C, D, F paper look like? To ensure that your first few grades were not excessively low because you had unreasonably inflated expectations, quickly thumb through the papers one last time to determine whether you have been consistent in your grading.
- Unless it is obvious that a student invested no time in writing the paper, end-comments should always begin with positive comments. This makes students feel their work is not irredeemable and prepares them psychologically to accept the critique which follows. End-comments should end with a summary of the paper's weaknesses and suggestions about how they can be corrected in subsequent papers.
- Some TAs prefer to comment in an impersonal manner. Instead of writing, "Although you show a good grasp of the material you fail to . . ." they write, "This paper (or essay) demonstrates . . ." This simple technique helps prevent students from interpreting your criticisms as personal attacks.
- Assigning split grades (i.e. A for content, B for style) can be an effective teaching strategy. In cases where students' intellectual skills outdistance their technical skills, a split grade reassures them that their ideas are valuable and worth the time it takes to express them well. Sometimes very bright students will attempt to bluff their way through by producing well-written essays with very little content. In these cases, a split grade will let students know that sophisticated writing skills are no substitute for doing the class work.

Objectivity and Grading

Be as objective as possible when grading students' papers. You can make yourself more objective by covering students' names when you read their papers. This will help make sure that your expectations about students' performance will not affect your evaluation of their work. After you've assigned grades, look over the papers again with the students' names in mind. If the responses were of a lower or higher

caliber than students' class performances, take this into account when making individualized comments on the papers.

Papers, like examinations in class, are also ways of getting feedback on the effectiveness of your teaching. If students' papers are uniformly good, either you've done a good job or you ask very simple questions. If the papers are uniformly or surprisingly poor, take another look at the questions or topics you gave to students. They may not provide students with adequate guidelines about how you wanted the question answered. It's also possible that you simply aren't getting through to students in section. Your best bet is to ask your students where the problem lies—with the questions, the reading material, the lectures, etc.

Although it is very difficult to obtain complete grading uniformity among TAs who teach different sections of the same course, some degree of grading consistency is both possible and desirable. It is hardly fair if roughly equivalent papers are assigned grossly disparate grades by different TAs. If such gross inequities occur, students will probably complain, and these complaints should not be dismissed. In these cases, consult your professor and fellow TAs and discuss grading standards with them. It may be helpful in this meeting to exchange a few papers and see how each of you rates them. If your ratings diverge substantially, then the students' gripes are justified, and you should try to arrive at a more uniform definition of what constitutes a specific grade in the course.

Specific guidelines for assigning letter grades are included in Grading Standards for Essay Exams. Other critical grading decisions include whether the TA should comment on outlines and rough drafts, whether students will be allowed or required to rewrite papers, and whether they will be allowed to drop their lowest grade. The professor in charge of the class should be consulted before you announce these policies to your section.

—Beth Haiken and Greg Schultz

Evaluating Your Teaching

As a beginning instructor, you may feel that evaluation is the last thing you need to think about. Being prepared for your sections, creating discussion questions, preparing good assignments—all these activities may seem more pressing than evaluation. But evaluation can provide you with information that can help you improve your skills in all these areas.

Many TAs associate evaluation with the students' end-of-year questionnaires. Unfortunately, if you wait until the end of the semester to evaluate your teaching, you cannot possibly make pedagogical changes which will benefit your current students. What follows are a number of evaluation techniques you can employ during the semester to determine the effectiveness of your teaching methods. Experiment with the ones that appeal to you. If you want to receive materials or references related to evaluation or teaching, contact the Office of Educational Development (OED) at 642-6392, 273 Stephens Hall.

All TAs should be aware that evaluation is attended by a number of problems. If you ask your students for comments on your teaching style, you may very well get criticisms, particularly if the section or lab is not going well. Take their comments openly; do not get angry at students for being honest. Do not get demoralized if the comments are critical. Use student evaluations to improve your teaching style. Regard their comments in same way that you wish them to take your comments on their classwork. TAs should also make absolutely certain not to retaliate against students who give negative evaluations—if you catch yourself making a disparaging remark in section or considering assigning the lower of two grades to a student who you think was critical of your teaching methods, ask yourself whether this is retaliation. Make it very clear to your students that you intend to use their comments constructively to improve your teaching methods. If there is even a suggestion that you might resent negative evaluations, rest assured that your students will not give you honest comments.

Index Cards

Several times during the term pass out 3x5 cards to your students and ask them to respond to two questions, one on the front and one on the back. You can pose general questions such as "How are you finding the course?" or "Any suggestions for changing the course? Any problems?" If you suspect that there is a specific problem, ask about it: "Is the textbook too superficial?" or "Is the pace of the laboratory sessions appropriate for you?" If your discussion sections drag you might ask students to provide suggestions about ways to liven it up.

Question Box

Bring a box or manila envelope to class and ask students to place their unsigned comments, questions, or complaints in it. Their questions will alert you to material they don't understand; clear up any ambiguities or confusion at the next class meeting.

Two-Minute Paper

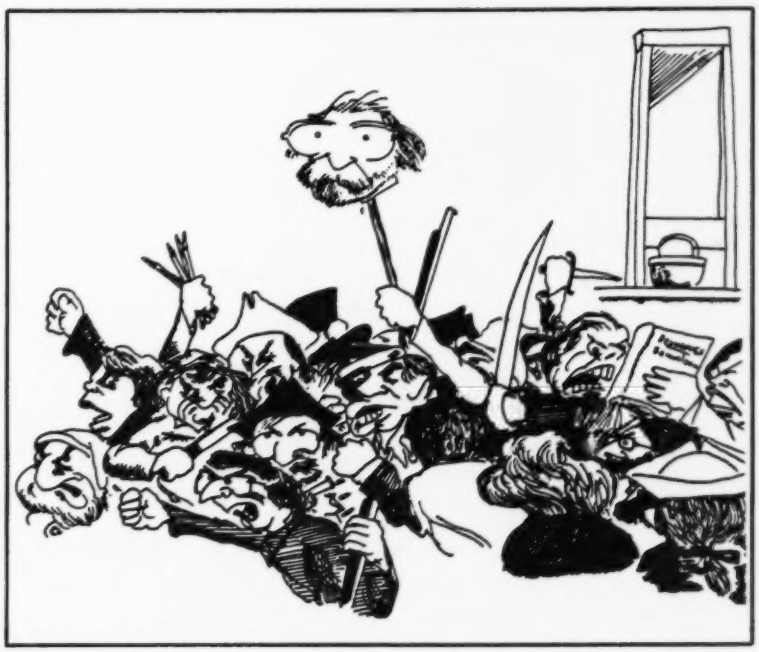
At the end of class, ask your students to write for a minute or two on the following questions:

- What is the most significant thing you learned today?
- What question is uppermost in your mind at the end of today's class?

These papers can help you evaluate how well you have conveyed the material. Additionally, your students get practice in organizing their thoughts and writing out their ideas.

Midsemester Written Evaluation

Once or twice during the semester hand out a short questionnaire (or write the questions on the board). A sample questionnaire is available at the OED office in 273 Stephens Hall. If you design your own questions, make sure that the issues posed are ones you can respond to during the term; otherwise your students may develop false expectations about the remainder of the course. Respond to the students' suggestions as quickly and as candidly as you can, explaining what you can change about the course and what you cannot or will not change.



Early class evaluation can save you trouble later on.

Borrow Students' Notes

Periodically ask to borrow students' class notes and review them to identify problems your students may be having with the material. If students' notes are garbled it may be that you aren't getting through to them because you are not explaining the material thoroughly enough. You should inform your class that you will be doing this and explain its purpose in advance.

Study Groups

Encourage your students to form small study groups and to send group representatives to discuss any difficulties or questions with you. Study groups provide students with opportunities to learn from one another and may make it easier for students to seek your help.

Oral Evaluation

Midway through the term invite a colleague to conduct an oral evaluation with your students. At the beginning of class, introduce the guest evaluator and then leave the room for twenty minutes. Have the evaluator ask your students to cluster into groups of five or six and take ten minutes to: 1) select a spokesperson who will write down the group's comments; 2) name something in the course that they find very helpful or worthwhile; 3) name something they would like to see changed; and 4) suggest how the course and/or the TA's teaching methods might be improved. The evaluator should circulate among the groups as they are working to remind them how much time they have left and to make certain that they are sticking to the task. At the end of ten minutes the evaluator will record the results on the blackboard. When all the spokespersons have reported, the evaluator summarizes the points of consensus and asks for clarification on points of disagreement. The evaluator then collects the written comments from the spokespersons, erases the board, and leaves to prepare oral or written summaries to be shared with the instructor later that day.

Colleague Visitation

Invite a teaching colleague to observe one of your classes and make suggestions. You will find visitation most helpful if you inform your colleague of your specific goals for the class meeting or the particular technique you are trying to perfect. Then your colleague can focus his or her observations and the results will be more useful to you. Be sure to let your class know that a colleague will be sitting in.

Videotaping

While watching yourself on a videotape can be a startling experience, it gives you an

excellent opportunity to judge how well you conduct a class: whether you dominate discussion, whether you allow enough time for students to think through questions, whether you maintain adequate eye contact, and so on. To arrange to have your class taped, call the Educational Television Office (642-2535). You will be able to arrange for a private viewing of the tape—no one else need see it. The Office of Educational Development (642-6392) will provide observation forms that you might find helpful in reviewing your tape. Again, tell your students beforehand that a particular class session will be taped.

—Barbara Davis

University Grading Procedures

According to University grading policy, the work of all students shall be reported in terms of nine grades:

> A (excellent), B (good), C (fair), D (barely passing), F (failing), and P or NP under the passed/not passed option. P and NP are assigned to undergraduates only; for graduate students the analogous grades are S (satisfactory) and U (unsatisfactory).

The letter I may be assigned at the instructor's discretion in cases where the student's work has been of passing quality but is incomplete for reasons beyond the student's control. The instructor must specify these reasons to the department.

A grade of IP indicates that work is in progress in a course that extends over more than one term. In this case, final judgment as to the quality of the student's work is deferred until the entire course sequence is completed.

Grade points per unit are assigned by the Registrar as follows:

A-4, B-3, C-2, F and I-0.

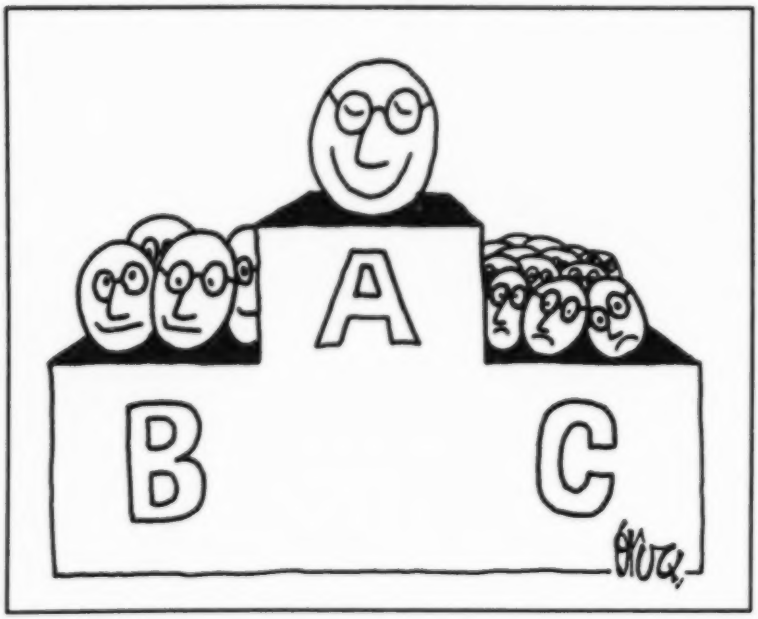
When attached to the grade of B, C, or D, the suffix "+" adds three-tenths of a grade point per course unit; the suffix "-" subtracts three-tenths of a grade point per course unit from grades of A, B, C, or D. An A+ carries the same 4-point value as an A.

Changes of Grade

All grades except I are final when filed by an instructor in her or his end-of-term course report. However, the correction of a clerical or procedural error may be authorized by the instructor who must inform the Office of Admissions and Records of the circumstances of the error. No change of grade may be made on the basis of a re-assessment of the quality of a student's work. No term grade except I may be revised by re-examination.

Repeating a Course

Only courses in which grades D, F, NP, or U are received may be repeated for credit. If the course was originally taken for a letter grade, it may not be repeated on a passed/not passed basis. Students may not repeat a course more than once without the approval of the dean of their college. For undergraduate students who repeat a course with an I grade without the approval of their dean, the I grade will be converted to an F and the repeated course will be treated the same as any other course in which an F was received.



A student in good standing is authorized to undertake up to an average of one course per term on a passed/not passed basis. A grade of P shall be awarded only for work which would otherwise be disregarded in determining a student's grade point average.

Grade Appeals

The procedure to be followed by a student with a complaint about a grade assigned by a faculty member consists of the following: 1) discussion of the complaint with the faculty member; 2) discussion of the complaint with the

department chair. A student may officially challenge a grade and have it changed if it has been assigned on other than academic criteria. A student who wishes to challenge a grade should consult the dean of her or his college or the ombudsperson. After the close of each semester, the Office of Admissions and Records will mail all students an unofficial copy of their academic records. The fall semester grades are sent to the student's campus address and the spring semester's grades are sent to the permanent address.

Deadlines for replacing Incomplete grades assigned to undergraduates are as follows:

Incomplete grades received in the fall semester must be replaced by the first day of instruction of the following fall semester.

Incomplete grades received in the spring or summer semesters must be replaced by the first day of instruction of the following spring semester.

V Teaching Students to Write

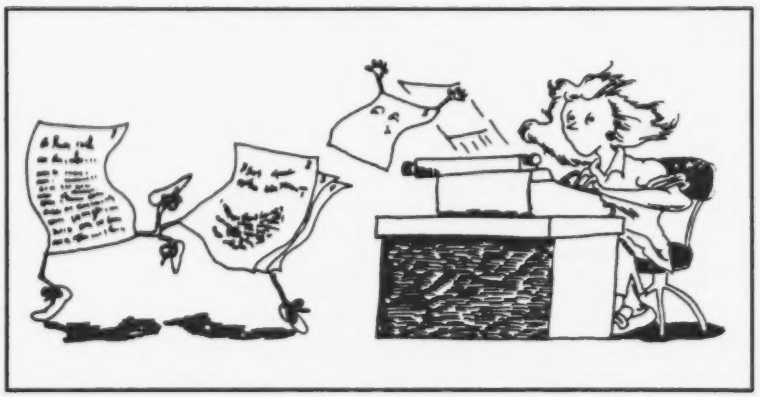
The ability to write clearly and well is one of the most important skills students should learn in college. Writing is also one of the most difficult things to teach. Even the well-known five-paragraph structure is not a magic formula, and no one has yet invented an instant-essay mix. (Just add water and stir, perfect essays every time . . . .)

TAs in almost every discipline are in some way concerned with writing, and they can expect to confront various levels of skill—or lack thereof—in their students. TAs should also be prepared to deal with different degrees of anxiety about writing, proficiency in English, and resistance to the whole idea. Even without formulas and mixes, however, there are many ways TAs can help their students improve their writing skills. The articles in this section address many different aspects of writing, from the rudiments of grammar to the elements of style. Even if you won't be teaching English, this section will better enable you to help your students in their efforts to communicate their ideas through writing.

Teaching the Writing Process

You're halfway through correcting the first batch of student papers for a course. From the top of the pile you pick the next essay, written by a student whose bright talk in class will, you hope, translate into lively writing. As you move through the paper, however, your expectations begin to sink. No thesis peeks its head from the thicket of ideas. Arguments lose their way almost the moment they begin. Paragraphs are cluttered with fragments, run-on sentences, comma splices, and faulty predication. The paper bears all the signs of a single-draft essay written the night before. Exasperated, you're tempted to apply the red pen with a vengeance. A memory of undergraduate days, however, restrains you; you recognize from the first typo the note of haste, fatigue, and desperation. Your bright student, who in high school wrote every single straight-A essay at the last minute, has flubbed his or her first effort at a college paper.

The example cited above represents only one type of bad writing. Other kinds come as easily to mind: the paper that adheres with arid fidelity to the five-paragraph essay structure or the essay whose rhetorical contortions tie up in knots. In the face of such misguided writing, what is an instructor to do? Unfortunately, no panacea exists. Each of these kinds of writing stems from different problems and requires a different remedy. However, they all have something in common: an *approach* that fails to allow the time or the opportunity for producing clear, thoughtful, and organized expression.



Good writing should have a life of its own.

The corrective to these failed approaches lies in the notion of writing as a *process*. Composition consists of a series of rewritings, a process of revision that begins with random jottings, progresses through a series of rough drafts, and is abandoned upon producing a more or less fair copy. This notion of process underlies the act of all serious writing.

A glance at the manuscript of a Yeats poem or a Hemingway novel will quickly dispel the myth of automatic writing and reveal the stages of messiness—the crossing-out, adding, patching, and phrase-juggling—that writers must work through to produce publishable copy. And what is true of enduring prose is generally true of the more ephemeral work done by those who make a life or a living by writing.

Still, few teachers of writing have made the principle of process the cornerstone of their pedagogy. Admittedly, students and teachers are too constrained by the fast-paced schedule of university instruction to invoke the idea of process in its most thorough sense. Yet short of the ideal of painstaking revision practiced by professional writers, we teachers can make the notion of process a significant part of our teaching.

The writing process can be divided into four steps: brainstorming, rough writing, polished writing, and revision. Although this plan is suited to teaching English 1A or 1B, it can be adapted, with some telescoping, to courses which give less prominence to writing.

Brainstorming

Brainstorming is by its nature inchoate and idiosyncratic. There is probably no systematic, universal way of getting students to play with ideas on paper. However, one way that I encourage my students to generate ideas for an essay is to have them begin with a question about their reading. You might supply the students with that initial question by giving them topics in an interrogative form. Or you might have them come up with their own topic-questions. The question each chooses has to be a "real" question —in other words, one which genuinely puzzles the student and for which he or she has no immediate answer. They can then write extended "answers" (about 250 words) to their questions.

I encourage students to pour their ideas onto the page heedless, for the time being, of grammar, spelling, and punctuation. They then turn in this piece of writing. I comment on it very briefly, guiding them in the direction of their thoughts toward a possible rough draft. I then pass these brainstormings back and encourage them to see me in office hours if they have questions about what I've written. Although these pieces of writing often reflect tentative or tangled thinking, they represent a start on a paper, one which the students have

made well in advance of the paper's due date and one which serves as an anchor for their next bit of writing. Having at least written this brief piece, they are prepared both cognitively and psychologically to move on to rough writing.

Rough Writing

In their rough drafts, students should do two things: come up with a viable thesis and sketch the shape of an argument. Before you have them turn in their rough drafts, discuss what makes a strong thesis. Is it limited in scope? Does it generate controversy or interest? Is it arguable—that is, can it be supported with evidence? When they bring their drafts into class, have some of the braver students put their thesis sentences up on the board. Then the whole class can discuss the merits and weaknesses of the sentences, applying the criteria outlined above.

Once they've gotten the knack of evaluating theses, break them into groups and have them assess each other's rough drafts. By encouraging them to act as editors of others' work, you may prompt them to become better editors of their own. By learning to adopt an editorial distance, they will have taken the first step toward becoming thoughtful writers. Once the groups have read through their drafts, collect all the drafts and scan them, making sure that everyone is moving in the general direction of a polished draft. If any students are stalled or dangerously misguided, ask them to come see you before writing a final draft.

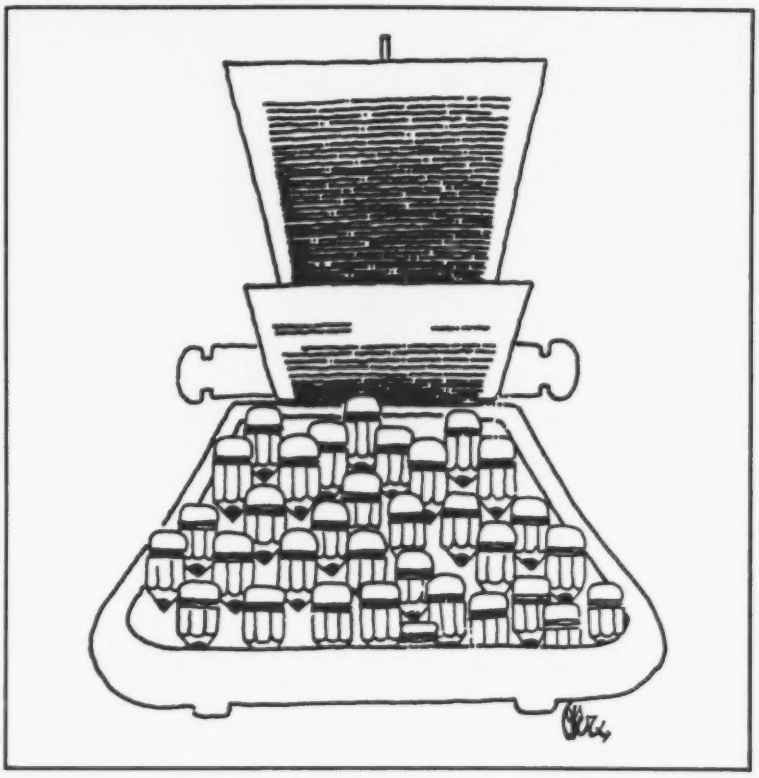
Final Copy

Once the students have gotten to this point in the writing process, they are pretty much on their own. During the course of the semester, discuss various aspects of structure, grammar, and style with them. However, putting these words into practice on any particular paper is the students' responsibility. Usually, provided that they have worked hard during the earlier stages of the process, they find the task of polishing a rough draft easier than they expected. Moreover, they now have the time to fine-tune their argument and streamline their prose—activities which were once luxuries when they were writing under the gun. As a result, you as a grader will also have an easier and more enjoyable task. Although teaching the initial steps of the writing process takes time, the investment yields dividends at the stage of the final draft.

Revision

The word "revision," used traditionally to designate the rewriting of a "final" draft, is a misnomer since all writing after the initial brainstorming is really a revision. However, for convenience's sake, let's stick to the customary use of this word.

Often the brevity of the semester doesn't permit revision of "final" drafts. However, if you can make revising part of your course, if only to the extent of allowing a revision of one paper, you will be serving your students well. If you can give them the chance once of following the writing process through to a stage where they are finally saying what they want to say, you will give them a taste of a "finished" product—a taste that may, with the more dedicated writers, create an abiding appetite.



The Writing Process

Although I've outlined a way of incorporating the writing process into English 1A/1B, I think the concept of process is central to any course in which students write essays. Whether you teach sociology, history, or business administration, whether you require an essay every week or a single research project during a semester, you can help you students to write more easily and more clearly if you require that they write in stages. Even if you pare the process down to two steps—the writing of a rough draft or abstract before the writing of the fair copy—you will allow your students an amplitude in their approach to writing which is bound to make

them better writers. The bright student I described at the outset won't have a chance to procrastinate so self-destructively. The hesitant writer, wedded to the five-paragraph essay, will learn spontaneity and the value of improvisation in the course of brainstorming. And the writer frustrated with entangled logic will have the leisure to unravel thoughts and weave them into an orderly essay. By teaching the writing process, you will leave all of these writers a way of going at writing—a way that will stick with them long after they have forgotten the difference between restricted and non-restricted cases or the precise usage of the semi-colon.

—John McBratney

Writing Wrongs

There is no single perfect method of teaching students to write. TAs will encounter students with different kinds and degrees of writing problems. The hints provided below address the most basic and severe writing maladies TAs confront. These are by no means the only techniques available, nor is their usefulness universally accepted. TAs should plan to present them as a smorgasbord of solutions to students' writing woes and encourage their students to try them all at least once.

Problems, Questions, and Thesis Statements

One of the first problems TAs may encounter is teaching students to select a manageable paper topic and define a coherent argument. Most students begin a paper with a general interest in a topic but without a thesis or well-defined set of questions in mind. A TA should have students come in during office hours to discuss the paper well in advance of the due date, and should help students narrow their focus.

A TA in sociology described the following scenario: "A student told me she wanted to write about blacks in Haiti. When she left my office she was ready to begin researching the impact of poverty on family structure in contemporary Haiti. I asked her progressively more specific questions to encourage her to define her interest. During what time period? What socio-economic class of blacks do you want to study? What aspect of black life are you most interested in—community or family life, politics, religion, or labor? What particular aspect of family life do you want to examine? You get the general idea."

Students should have not only a focus, but also a specific set of questions to answer. The answer to these questions will be the student's thesis statement. Students are often unable to develop a thesis statement because they think it has to be terribly original and complex. Assure your students that their purpose is not to produce a definitive history of the world or the great American novel but rather a concise paper on a defined topic. A simple thesis statement will facilitate their success. The preliminary work you do with your students will eventually save you time and energy, as well as the pain of having to give a lot of bad grades. A student who begins writing the final draft of a paper with a manageable topic and a clear focus will produce a much better paper than will the student who doesn't define a subject or discover a thesis until after the final draft is written. If students have an argument but cannot define a thesis, then you may want to have them start writing a rough draft. Often the argument—and the thesis that goes with it—will jump out at them from already-written pages. Even if it doesn't jump out at them it may jump at you.

Sometimes all it takes is for you to say, "I see a sentence in this paragraph that would make a very good thesis for the paper. Can you find it?" It sounds elementary but it works wonders for students' papers and for their self-confidence.

Clustering and Outlining

After students define a thesis, they have to figure out how they're going to structure and argue the essay. An outline, like a thesis, is almost always essential to a good paper; with longer papers outlines become more important. However, your students may have real difficulty producing a usable outline. Some have never outlined; others have great difficulty in outlining a paper before they've written it. Students often have trouble understanding why an outline is important; they see it as extra work imposed by sadistic TAs. Tell them to write one (and ask to see it) and explain why the outline is such an indispensable preliminary step.

Ideally, an outline is a skeletal version of the paper. The outline of the introduction should include an idea for establishing the importance and scope of the topic and a concise thesis statement or set of questions that the paper will address. Not all TAs think that a thesis statement should appear in the first paragraph; some think it makes the paper boring. If your

students have mastered basic writing skills, you may want to encourage them to ask a question at the beginning, answer it throughout the paper, and offer a concise conclusion at the end. If your students are still dealing with basic writing problems, it may be best to insist that their thesis statement appear at the beginning or they may forget it altogether.

Depending on the length of the paper, subsequent sections of the outline represent either paragraphs or "chapters." If each section is to become a paragraph, the line in the outline should be conceived of as a preliminary topic sentence and should be followed by supporting evidence. If each segment of the outline will become a longer section of the paper, then it should contain the main idea as well as separate sections (with preliminary topic sentences) for each supporting paragraph. An outline is linear and forces students to figure out how to get from point A to point Z; it only works if students do this by putting their ideas in a logical, sequential order. Leaps of faith are not appropriate, and outlines force students to figure out if they've been making them and if some link in the logical chain is missing. Outlines also force students to categorize and prioritize the material they intend to cover, and to make connections between ideas.

Some students simply cannot envision the linear progression of an outline before they've written the paper. A technique that helps some students is clustering, which facilitates the outlining process by forcing students to draw connections between the different facts and ideas they want to include in the paper. Tell students to take a blank piece of paper and write the main idea or topic in the middle. They should then write four to six secondary ideas in a circle around the first one, like spokes in a wheel. Students should surround these ideas with supporting evidence, again constructing small wheels. In a short paper these initial clusters will become paragraphs, while in a longer paper they will represent sections, with paragraph clusters coming off them. This technique can help students to visualize connections between ideas, and they can draw arrows or dotted lines between the separate ideas to show which necessarily precede or introduce others. From this pictorial representation, students should construct an outline which will sketch the progression of the paper in linear form.

Beginning Writing

Even a good outline does not ensure that your students will produce a paper efficiently. Writers' block or fear of failure may paralyze students when they actually try to write. You might suggest one or both of the following strategies to students experiencing writing blocks.

Many students have a strange conception of what academic writing should be. They feel that their vocabulary is inadequate and their style too simple; they will not begin until they find enough polysyllabic words to academicize their writing. Good writing consists of complex thoughts expressed in simple language; simple thoughts should not be disguised by verbosity. TAs should convince their students that what they write first will not be their final product. The most important thing is for them to get their thoughts on paper; style can be changed later.

And this, Geoffrey—
"When Two Arms Were No Smaller Sooty
The Daggers Or Mares Have Passed To The Roots..."
you call that proofread?

One experienced TA uses the following method of getting students to begin writing. "When a student comes to me with an idea for a paper but cannot begin writing I usually ask him or her to write out the thesis and then to begin by writing in very simple language the paragraph of the paper with which he or she feels most comfortable. It can be any paragraph —from the beginning, middle, or end of the paper. Students usually choose to write relatively descriptive paragraphs from the middle section of the paper. I then ask them to write the paragraphs that immediately precede and follow this paragraph. Some students write the entire paper this way; others simply compose a small section of the paper and then go back and start at the beginning. But the most important

thing is that it gets them to start writing. Once they get some of their ideas down in simple language they can go back and polish the prose."

The above method will help students overcome temporary writing blocks and paralyzing concerns about their writing style. Free-writing is another exercise useful to students with chronic or persistent writer's block. It will accustom your students to putting down their thoughts without running them through an internal dictionary and style manual. Have your students get out blank pieces of paper. Give them five minutes to fill the paper. They can write about anything they want, including sex, drugs, rock-and-roll, and why they think this exercise is dumb. The only requirement is that they not stop writing until the page is full. If you don't want to take time in section, have students do it at home and show it to you after class.

Many students are afraid to write because putting their words down on paper means someone will judge them on what they produce, and they tend to associate their self-worth with the grades they receive. Free-writing, because it is an ungraded exercise, encourages students to write without worrying about how someone else will judge their work.

Topic Sentences & Paragraph Structure

Paragraphs are the units out of which the essay is built. Encourage your students to see paragraphs as connected units; each should be linked to the one preceding and following it, but should also be able to stand alone. Paragraphs must have topic sentences—the mini-equivalent of a thesis statement. The ideal topic sentence summarizes the argument presented in the paragraph and foreshadows the supporting evidence which makes up the body of the paragraph. A TA should be able to read the thesis statement and topic sentences of a paper and get an accurate idea of what the paper is about. Paragraphs must be linked by transitions either at the end of one or the beginning of the next. Either is correct, although stylistically one or the other may be more appropriate at certain times.

Some students have a difficult time visualizing paragraphs. If students seem incapable of writing coherent, unified paragraphs, have them try writing each paragraph on a separate sheet of paper. It will be easier for students to see paragraphs as distinct units and to check that each has a transition, a topic sentence, and related evidence. You might also have them underline the topic sentences; this will remind them of the main idea and discourage them from including unrelated information in the paragraph.

Creating the Final Draft

Proofreading is an invaluable skill which you should encourage your students to develop. Proofreading helps students catch errors made through carelessness—typos, misspellings, etc. It also assists students in identifying and correcting more important grammatical mistakes. Students who use a different and more complex vocabulary when they write than when they speak often create problems for themselves. They are more likely to make errors of agreement, agency, and predication than students who confine themselves to simple sentences.

Encourage students to read their papers aloud to themselves, adhering to this simple rule: If it sounds wrong, it probably is. Students should ask someone to check it for them or do it themselves, using a style or grammar manual. This technique can also help students whose first language is not English. Although many of these students have mastered spoken English, their unfamiliarity with the language manifests itself in their prose. Convince such students that speaking and writing skills are related. By reading their papers aloud, they can use their speaking skills to improve their written prose.

—Beth Haiken and Greg Schultz

Naming Names

TAs often see student work seriously marred by grammatical errors. Students need to know that such work is unsatisfactory; simple comments such as "ungrammatical" or "awkward" don't help them.

Try to keep a sense of proportion. Don't bother trying to correct or reshape sentences that are factually wrong. If a student writes "Paraguay, the capital of Bolivia, are the largest city in sub-Saharan Africa," you don't need to fuss over the agreement error. The student has bigger problems!

If the facts are correct but the sentence sounds strange, check the predication of the sentence: do the various parts make sense together? 1) Is the student saying the subject *is* something it cannot be? "A senator is an awesome position" (can a person be a position?).

2) Is the subject *doing* something it cannot do? "Six drilled holes lubricate the crankshaft." (can holes lubricate anything?) Marginal questions, like those shown in parentheses, can show what's going wrong.

Only when facts and predication are straight should you start pointing out grammar errors. When a student makes many mistakes, be selective. Point out the repeated and most noticeable ones first. Students with overwhelming problems may be referred to the Student Learning Center (first see Academic Assistance and Tutoring in the Resource section) for help.

Here is a vocabulary of common grammatical mistakes, along with examples of how to correct them. One way you can help students is to identify each error the first time it occurs, giving an explanation of the term and a corrected version of the sentence. After that, the notation should be enough of a reminder.

Agent

Who is doing what? Clarity suffers because a verb form has no expressed subject, or a confusing subject. 1) Problems with agency often relate to over-use of the passive voice. Sometimes the agent is not indicated by the writer, and the reader may infer any of several: "If the evaluation is questioned, another authority must be consulted" (questioned by whom? consulted by whom?). 2) Sometimes the agent indicated is doing something it cannot do or acting on something on which it cannot act: "Experimentation is necessary for all hypotheses wishing acceptance by the scientific community" (can hypotheses wish anything?).

Agreement

Lack of grammatical consistency between parts of a sentence: 1) Subject-verb agreement: "Different dialects reflects different realities." 2) Pronoun-antecedent agreement: "When I express my thoughts to another person, they will hear the tone of my voice."

Comparison

Problems in comparison stem from problems in logic, and TAs should try to distinguish between the two. 1) Most faulty comparisons try to compare items that cannot be compared: "Mary has a punch like a boy" (can a punch be like a boy?). 2) Some faulty comparisons involve structural errors: "Writing comes more natural to some people as math does to others." 3) Incomplete comparisons express only half of a comparison: "A well-written paper is easier to understand" (than what?).

Coordination

1) The misuse of a coordinator—"but" for "and," for example. 2) The use of coordination when subordination is needed: "This is a book that everyone should read, and it reveals something about human nature" (*because* it reveals...?) 3) The coordination of clauses which are not logically sequential or coordinate: "The Supreme Court said yesterday it will again study the question of what is obscene and how far states can go in aiding parochial schools." This form of the error is often treated as a problem in *parallelism.*

Dangling Modifier

A modifying element—a single word, a phrase, or sometimes a whole clause (though clauses dangling are frequently errors of *subordination*)—without a referent within the sentence: "With a wandering mind and a little imagination, ideas could be composed into a little story." Note that the passive verb in the main clause frequently leads to dangling modifiers.

Fragment

1) A sentence lacking a subject, a verb, or a necessary complement: "Good meaning able to acquire grades that are above average" (no finite verb). 2) A sentence introduced by a subordinating conjunction, but lacking a main clause: "Although being able to write well also helps one to think more logically."

Grammar

Error in grammatical form or choice of form: 1)Error in pronoun case: "Between you and I..." 2) Incorrect verb form: "He use to do that." 3) Adjective used for adverb or vice versa: "He learned to write very efficient." 4) Noun for adjective (or other confusion of parts of speech): "He is very prejudice" or "Through writing, one can become better knowledged of exposition." 5) "Like" and "as" used incorrectly: "He did it like I did." 6) "It's" (it is or it has) used for "its," or vice versa: "The dog bit it's tail." 7) Misuse or omission of possessive apostrophe: "It's her's, not Jims." This is NOT a mistake in spelling and should not be marked as such. Similarly, the misuse of apostrophes or the faulty choice among homophones—"there," "they're," or "their," and "who's" or "whose"—is also a grammar mistake. 8) Omission of possesive form before gerund: "John failing surprised me."

Idiom

Phrases determined by usage, not logic, like vocabulary. Idioms must be memorized by non-native speakers. Such errors do not have to be explained. They are wrong in the same way that a misspelled word is wrong: absolutely. Idiom errors include: 1) Incorrect use of prepositions:

"The teacher's enjoyment *for* the language." 2) Incorrect use of articles: "Ireland is *the* island." 3) Wrong choice of gerund or infinitive as second verb or after a verbal form: "They cause women breaking away from their role..." 4) Changes or inaccuracies in proverbs or standard expressions: "The law of diminished returns."

Jargon

The use of pseudo-technical vocabulary and style in non-technical settings. The writer usually intends to make his or her statements sound more "scientific" or otherwise authoritative. Clear signs of jargon: 1) Needless and excessive use of the passive voice: "It is understood that . . ." 2) Heavy reliance on the verb "to be" to the exclusion of other verbs. 3) Constant use of nouns as modifiers (and avoidance of adjectives). "Consideration of industry mobility indicator factors . . ." 4) Use of vapid, etiolated key factors in interchangeable (and often meaningless) permutations: "aspects," "factor," "facet," "area," and so on.

K—Awkward

"K" is the simplified notation commonly used instead of the full word "awkward." Although the structure is correct by the letter of grammatical law, it could be a lot more felicitous: "The assumption of the illiteracy of poor spellers is usually made by middle-class educated people." Passive constructions frequently lead to awkward sentences.

Misplaced Modifier

Misplaced modifiers usually bother the reader most when they are misleading and not just technically misplaced: "I read an article about how to grow plants in a magazine" (can plants grow in a magazine?).

Mixed Construction

The result of switching syntactic horses in mid-sentence: "The scientist can only hope that when the knowledge he released to the world, be used for good" (writer has forgotten that she started an adverbial clause of time); "It is in observing that men can recognize errors, or possible solutions, but it is in applying that recognition that gives the observation purpose" ("applying" suddenly replaced "man" as the subject of the last verb in the sentence).

Modification

Part of the modification structure of the sentence is clumsy, confusing, or incorrect. Usually this mark is reserved for badly handled prepositional phrases and relative clauses. 1) "Most of us have jobs we don't even like, with a daily routine we follow strictly" (we may have a daily routine, but our jobs don't). 2) "We have a very enormous intake capacity (for information), that is rapid, but only capable of regurgitating the basics" (a great many things go haywire in this sentence, including *all* modifying elements; note especially, however, the relative clause—can a capacity be rapid?—a false attribution that borders on being a predication error).

Parallel Structure

1) An error in the mechanical structure of a parallelism: "He likes flying and to swim." 2) an incompatible parallelism of ideas: "People can be forced to fight a battle, a revolution, an unjust regime, a riot, or other form of violent demonstration" (does the work "fight" here mean "wage" or "oppose" or both or neither?). Parallelisms may involve more than two items: "This person has given me the insight into being an individual, to having my own thoughts, my own views, and to extend and reach for whatever goals I have set for myself." See also *coordination.*

Point of View

"One" becomes "you" becomes "we": "One is

made aware of problems that confront you every day of our lives."

Redundancy & Repetition

1) Redundancy: Too many words are used to express a single idea: "An ordinary biography of normal life . . ."; "Melville begins right away, telling first of his background." 2) Repetition: The repeating of an individual work, phrase, structure, or (most commonly) whole idea or argument. Often a symptom of the lack of sufficient ideas to fill out the required essay length. Correction requires adding ideas rather than simply cutting words out.

Reference

Every initial "it," "this," or "that" is not necessarily a reference error, and broad reference is not always a bad thing, but . . . Reference errors usually involve pronouns or demonstratives with no clear referent. Watch also for dangling "whiches," and the use of "the" when no previous reference to an item has been made: "The book is very interesting" (no book has been mentioned).

Run-on Sentence

Often the result of a comma splice—the use of a comma instead of a period or other form of end punctuation: "It doesn't just happen, this talent must be cultivated." Such splices are common with conjunctive adverbs ("however," "nevertheless," "thus," "then," etc.) which, despite their name, cannot function as conjunctions. Run-on sentences can usually be corrected easily by inserting a) a period plus capital letter; b) a semi-colon; c) a comma plus "but," "and," etc.

Subordination

1) Omission or logical misuse of a subordinating conjunction, e.g., "because" used where "whenever" should go. 2) Excessive use of subordination when a participial phrase might be substituted. 3) Faulty structure in reported questions and statements: "He wondered what was I doing." 4) Omission of a necessary "that" to introduce reported speech or a relative clause: "He told me, in a voice I could hardly hear, he was going."

Tense

1) An unwarranted switch from one tense or mood to another in the body of an essay. 2) An error in sequence of tenses, either in a conditional clause: "If he would come, I will go" or in reported speech "He said that he will come."

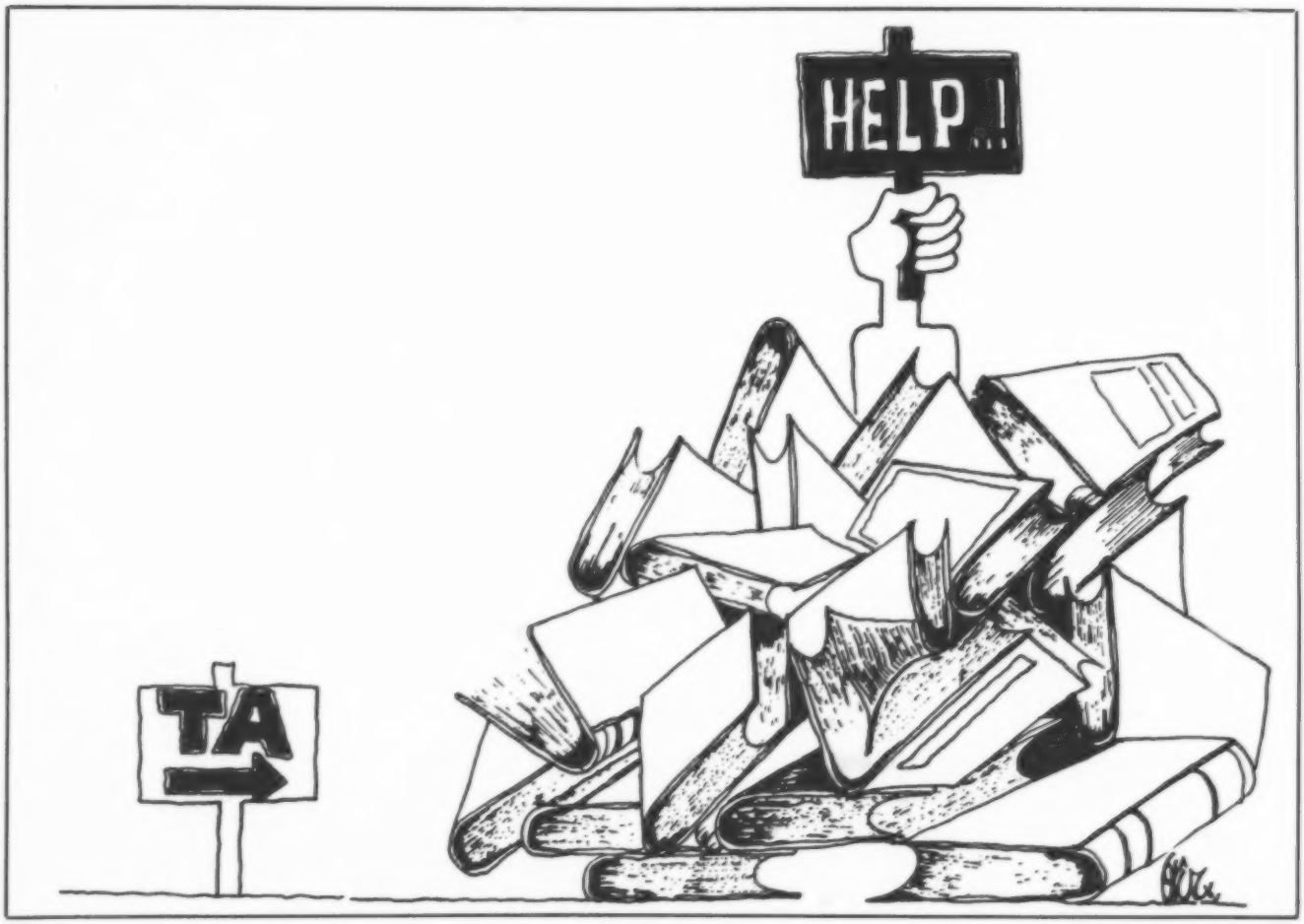
—Phyllis Brooks, Beth Haiken, and Greg Schultz

VI The TA as Employee

Berkeley is in some ways a great place in which to teach. TAs often find that their courses are stimulating, their professors intelligent, and their students eager and attentive. There are moments—particularly after an intensely animated discussion section—when the TA may feel euphoric, believe that s/he has both profoundly enhanced the students' intellectual development, and become a member of the nation's intellectual elite.

But just when you are patting yourself on the back and calling home to tell your folks that you are now one of the "best and the brightest," your bubble bursts. Your paycheck is late and the rent is due, you find out that the office to which you have been assigned to meet with your 50 students is about the size of a phone booth, you discover that you've been turned down for a second semester of TAing because you are not part of the old boy network that dispenses the departmental fishes and loaves. Welcome to reality. You may be a high-powered intellectual, but you are also an intellectual *worker* and as such should be prepared to deal with employment-related problems.

The following articles detail some of the employment problems you may encounter as a TA, and suggest means of remedying them. TAs will also find below essential information on salaries, job descriptions, taxes, and the University grievance procedure, which should help them understand their rights and responsibilities as employees.



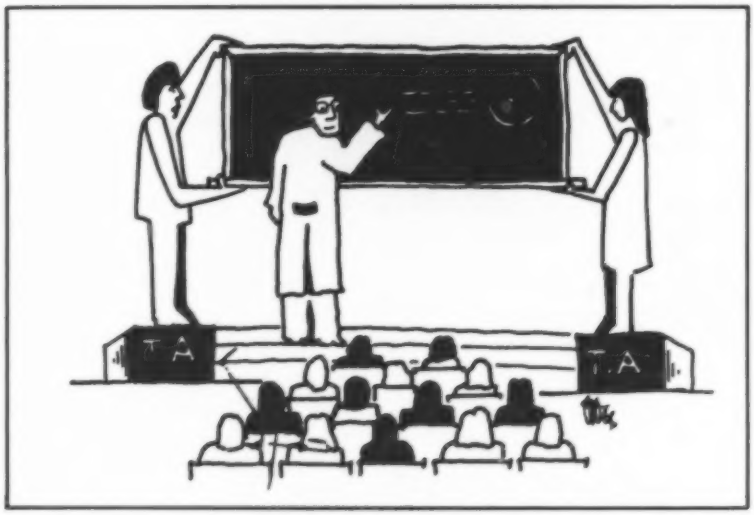
Problems and Prospects

The TA's job is one of the most rewarding at the university. With few barriers of age or status separating them from their students, TAs get to witness up close the educational system at work. As a TA, you can become quite attached to your students; you are disappointed by their setbacks and secretly cheer their successes.

"Students I had in class a year ago still come to me and talk. They tell me the books they are reading, and I realize I sparked an interest that will last a lifetime," said one TA. "That's a success; that feels good."

What Is a TA?

But being a TA has its unpleasant side as well. The TA is stuck in an ambiguous role—a crazy mixture of apprentice, worker, and student. Because of this ambiguity, departments tend to



be lax in providing TAs with crucial information concerning their employment responsibilities and compensation. In fact, 60 percent of the TAs surveyed by the Graduate Assembly last year reported that their departments had never shown them a job description. Thus TAs can end up working more and being paid less than they expected.

A TAship means different things to different people. To a graduate student, a teaching assistant position is work. Teaching students provides a very valuable service to the university, and after grading a tall stack of papers or spending a late night in the library preparing for section, it certainly *feels* like work.

To many university and department administrators and faculty, however, a TAship becomes something other than a *job*. It is an apprenticeship, a chance to be a "fellow" of the academic community. It is also, in the eyes of the department, a form of financial assistance, and in a few cases, a degree requirement.

As one TA said, there exists an "ideological tension" between your role as you see it and your role in the eyes of the university administration and the department.

And this "tension" is far from abstract. It manifests itself in the way TAs are treated by their employer, the University of California. As one TA said, "we end up being thought of as audio-visual aids."

"They don't seem to care much about you as an employee; they don't take you seriously. They often pay you late and don't seem to care very much, as if they have no obligation to you. It seems they think they're doing you a favor by hiring you. There is a real lack of communication between the academic and bureaucratic sides of the university. The least of your problems is teaching; the teaching, the students, are good."

The following is a list and description of the employment problems you are likely to face as a graduate student instructor at U.C. Berkeley, beginning with hiring. It is not a short list. And unfortunately, not all these problems have ready solutions. In the past three years a graduate student union has formed on campus, as yet not recognized by the university, which has helped bring some of these problems to a partial solution and begun to attack others. The Association of Graduate Student Employees (AGSE, 2511 Channing Way, telephone 549-3863) is a good source of information and encouragement if you face a job-related problem. The Graduate Assembly (telephone 642-2175) can often help as well.

Hiring

"Favoritism, patronage, cronyism—whatever you want to call it—in most departments that's how people get hired. It's certainly true in mine."

While this TA may seem overly cynical, in a survey last year by the TA Training Project, favoritism and ambiguous hiring practices were the most oft-cited complaints about jobs.

One woman TA described the hiring system in her department as an "old boy's network," from which she felt locked out. She said the hiring system put too much emphasis on the professor's recommendation and she resented having to "buddy-up" to an influential professor to get a job.

"When I asked about a job, I was told: 'You go talk to a faculty member.' I refused to do that as a matter of principle. Then I found out that other grad students were running around setting up meetings with professors. I hated being pitted against my fellow students that way."

Most departments do have a formal evaluation procedure for alloting postions to TAs and readers and in some departments hiring is done carefully and fairly. But just what criteria are used and how closely they are followed vary widely from department to department. In some departments, especially the smaller ones where jobs are quite scarce, the selection process can appear quite arbitrary.

"You're never actually shown a list of criteria. If you don't fit their standard—and you don't *know* their standard—you don't get the job."

Sometimes hiring is based on a standard as ambiguous as "value to the department" and even when the standards are more specific, graduate students are rarely informed of why they were chosen or rejected.

"There is an attitude coming from the department that 'we don't eliminate you, you eliminate yourself.' It's not the system, it's not the structure, it's you."

The standard procedure to find available jobs is to see the graduate secretary in the department where you want to work. He or she then puts your name on a list which is passed on to a committee of senior faculty members who decide whether you will get a job.

Things are not always this straightforward, however. Some TAs have complained that in their departments the graduate secretary exerts almost dictatorial control over who gets which job and others have said that a professor's word in the graduate secretary's ear can quickly change the order of the list.

Most departments deny that faculty favoritism dominates the selection process. But as one graduate secretary said, "It doesn't hurt to talk to the professor you want to TA with. When I make out the list I ask the students to put the courses they would prefer to teach and I ask the faculty which students they want to work with. If the students get a professor's recommendation, it won't help them get a TAship, but it will help them get to teach the course they prefer."

The priorities used to select graduate students for TAships—which usually, but not always, include academic performance, financial aid, and teaching experience—can cause problems for both the departments and the prospective TA.

Academic performance is a fairly objective yardstick, but what about teaching experience? The department wants the best teachers, which usually means the ones with the most experience, but it also wants to give the greatest number of students the opportunity to teach. It is hard for graduate students, some of whom are required to teach as part of their degree programs, to know quite where they fit in.

Discrimination Against Minorities?

Some departments discriminate in hiring if the applicant is already receiving some sort of assistance, viewing the TAship as a form of financial aid.

Graduate students have complained that defining TAships as financial aid discriminates against minority students, many of whom attend the university on fellowships.

"We have been doing a lot of stuggling to balance financial aid with the other criteria when evaluating students for TAships," said one graduate department secretary. "Before, we would send minority students (who have aid packages) to teach in other departments without grad programs. There is now an attempt to make it somewhat more an *academic* priority."

It is common for TAs in crowded departments, or for those whose aid packages disqualify them from consideration in their own departments, to seek teaching jobs in departments that do not have their own graduate programs, and consequently, do not have their own pool from which to choose TAs.

Read Your Contract

Teaching outside your department of study can bring its own problems. One TA who was hired outside her department accepted the job without realizing that over the summer, her classification had been changed from one-half time to one-third time.

"I just happened to look at my contract when I was walking over to the personnel office. Had I not looked closely at it, I never would have known."

Worried, because she had turned down other offers thinking the job was regular half-time, she brought the matter to the attention of the department secretary, who "simply erased it and wrote in 20 hours." Other students, who mailed in their forms assuming the job was the same as they were used to in their own departments, must have received a rude surprise when they opened their first paychecks.

Last-Minute Hiring

Uncertainty about hiring procedures and job openings is further exacerbated by the timing of employment notices—many come at the last minute. One graduate secretary said because of

enrollment fluctuations and last minute budget adjustments, her department hired as late as the third week of the semester.

Because of their relatively low position on the academic totem pole, TAs are the first to be put on hold.

"I was the first alternate to TA a class. I also had a job as an RA, and a job as a reader, but my first choice was to TA. I finally found out the first week of class that I was needed. The stand-by hiring procedure is ludicrous. I had to put the other people off for weeks."

This incident—and many like it—occurred despite U.C. Berkeley's new and much vaunted Advanced Computerized Enrollment system.

Job Descriptions and Job Tensions

Once you are hired as a teaching assistant, you work in one of society's most ill-defined and ambiguous jobs. Your "boss"—the professor you work for—thinks of him or herself as your "mentor," the organization that issues your paychecks thinks it's doing you a favor by letting you work for it, and you, having already put in twice the time you are being paid for and still facing a stack of ungraded papers, are left wondering what this strange thing called "collegiality" is all about.

If the professor you work for thinks of you as a "fellow" and not as an employee who is being paid to perform some clearly defined duties, he or she may ask you to do work not listed in your formal job description. Don't be surprised if you are asked to do administrative footwork, give a lecture, or perform some other task which lies outside your job description.

Some TAs call this an unfortunate but unavoidable product of working in the loose, collegial atmosphere of the university. Others call it exploitation, pure and simple. Whatever it is called, working outside of a job description is one of the most common employment complaints voiced by TAs.

When asked by a professor to perform some work you know is outside your job description, you can of course say "no." But because of the complex nature of a TA's relationship to his or her "boss," this is hardly a solution.

As one TA said, "When they ask you to do more work than you are paid for, of course you're going to do it. These are your idols—the people *you* want to be someday."

Although it may be hard to say "no" out of respect for a professor, there is a more important reason graduate students are reluctant to turn down a faculty member's request. Bluntly telling a professor you won't do what he or she asks is a political faux pas that may haunt you the rest of your academic career. Remember, you will need a good word from this professor to get a TAship in the future, or to give you a positive report on your orals examination and thesis. Challenging a professor can cost you the kind of recommendation that could land you a job when you complete your degree.

"The people who ask you to do this extra work have a good deal of control over your career. If you say 'no,' they won't ask you to TA, they won't write you a good recommendation. There's a reason to go along with the exploitation," one TA said.

But working extra hours is also likely to hurt your academic performance, and eventually, your career. Even a glowing review from a professor can't get you a job if you don't have the grades or a completed dissertation.

And many graduate students believe it is unethical to accept passively what they see as exploitation. As one TA put it, "the grubbing that one graduate student does this year is the job that grads will be *expected* to do next year."

Crowded Classes

Requests from professors to perform extra work can only seem to many TAs as adding insult to injury because, especially in the more popular departments, class overcrowding—and all the extra work it brings—is one of the most persistent and frustrating problems TAs face. In one especially crowded introductory course in a social science department, a half-time TA was responsible for grading the papers of, holding discussion session with, and counseling over 100 students.

"The workload is horrible. I have had 89 students and 103 students that I've been responsible for in one semester. In the intro

classes there are usually about three TAs for over 300 students," said one social science TA.

Crowded classes not only lessen the rewards a TA receives from the teaching experience, but also seriously handicap the education the undergraduates receive.

When classes are too big, one TA said, "You have to do things to prevent the class from taking the rest of your life to teach. Some of these things really detract from the learning process. Instead of testing for ability, testing to make people think, you have to design tests which can be graded quickly—multiple-choice and short-answer exams. It really hurts the education of the students when you are forced to devise tests like that."

Some departments, however, set reasonable limits on TA teaching loads; they will hire more TAs rather than place more than 50 students under a single TA. Check with your professor, the grad secretary or your fellow TAs as to the workload limits in your department.

Late Paychecks

According to experienced TAs, the average teaching assistant can expect the law of bureaucratic averages to keep at least two or three paychecks from arriving on time.

For some graduate students, a late paycheck or two doesn't cause problems. They grumble and curse the bureaucracy. For others, however, getting a paycheck on time can mean the difference between paying rent the first of the month or bouncing a check.

If your paycheck does not arrive on schedule, don't suffer in silence. As a TA you've earned that check, and the university as your employer has an obligation both to pay you on time and to move expeditiously to rectify errors which cause late checks. Late payment of TAs was one of the first concerns addressed by AGSE, and their efforts have made the process of tracking down your salary much less painful. The first place to go in the event that you are not paid on time is the department's graduate secretary. If the mistake was not made on the departmental level, ask the secretary to contact Elizabeth Mills, the late paycheck expeditor in the graduate division (642-7101). She will track down your check and can authorize an interest-free late paycheck loan for up to $600 if the paycheck problem is too complex to be solved immediately. You may also qualify for an emergency loan (interest-free) if you are registered and up to date on other loan payments. You can get up to $250 per semester from the Emergency Loan Desk in 224 Sproul Hall, 9 am to 12:45 pm Monday through Thursday.

Office Space

Another irritating problem at U.C. Berkeley is the lack of proper teaching facilities. As one TA put it, "We are expected to dish out first-rate services in third-rate circumstances." Private offices are almost unheard of for TAs at Berkeley. Instead, you are expected to give your office hours counseling and advice in the same 20 x 14 foot room as four or five other TAs. According to a TA in one of the engineering departments, "Two dozen TAs share the same office and there are not enough desks." Cramped, noisy and impersonal quarters are the rule—some TAs are forced to hold their office hours at cafes or at home just to escape the noise and the crowd.

Other universities—and not just cash-rich private universities—assign each TA a private room, and provide each TA with a private carrel in the library. Don't expect it here. But if the office situation gets unbearable, let your department chair know; it is sometimes possible for the department to attain additional office space or furniture.

Meager Benefit Package

TA compensation consists of a salary and little else. Because the university cuts a TAship short of half-time (49 percent time), working as a TA gives you no health or dental insurance. It takes several years to complete a doctoral dissertation, and most TAs are not covered during this time by their parents' insurance, as many undergraduates are. Many older TAs are married and some have children. A TAship does not provide any child care allowance.

"I had a small operation three years ago. My own personal insurance covered 80 percent of it but I was left with a bill for the remaining 20 percent. I just can't come up with $400 at the drop of a hat."

TAs also face many incidental teaching expenses. Some departments have copying budgets, but even among these many give them out only to professors. Stopping by Cleo's once a week to run off thirty copies of a 20-page handout can begin to drain your resources pretty quickly.

TAs are not the only ones affected by their employment problems. If TAs have to rush through grading because they were assigned an astronomical number of students, the undergraduates' education suffers. If TAs are notified of teaching appointments late and have to design course outlines and reading lists overnight, the students suffer. TAs owe it to themselves and to their students, then, to object when they encounter poor working conditions

or unfair hiring practices.

Of course the TA work experience at Berkeley cannot simply be reduced to a set of greivances and conflicts. Most TAs find teaching an intellectually rewarding experience. The TA with a low rent, an affluent family, reasonably sized classes, and a supportive professor may never encounter the types of problems outlined above; but if you lack one of these assests don't be shocked if your TAship takes on Jekyll and Hyde dimensions—intellectual bliss and employment misery.

—David Pickell

TAs Move Toward Unionization

Conjuring up images of burly steel workers cursing "The Company" with wrench in hand and fist in the air, a union at first seems out of place in the decorous halls and classrooms of the University of California at Berkeley.

But graduate students at U.C. Berkeley, responsible for a majority of the teaching and research hours here yet paid less than one-tenth a full professor's $78,700 yearly salary, have begun to feel like the blue-collar workers of academia.

And with long hours, little pay and almost no institutional power, graduate students can easily feel that they are no more than grist for a huge, mechanized higher education mill—a "Knowledge Factory" in the language of an earlier movement for the democratization of higher education: the Berkeley Free Speech Movement of 1964.

"Administrators at the University of California act like the administrators of General Motors. They act like they're selling plastics or something. They don't seem to know that their product is academic quality," said one U.C. Berkeley graduate employee.

The Association of Graduate Student Employees, with "well over 1000 faithful" according to AGSE executive committee member James Schamus, was formed to give grad students a voice as employees of and participants in the organizational and intellectual community of U.C. Berkeley.

The association, then barely a semester old, became a union in the spring of 1983, and since then has negotiated an installment plan for payment of grad fees (this has since been revoked by California Hall), prompted the university administration to distribute the grievance procedure to all grad student employees, offered an ongoing critique of university policies on hiring, safety, benefits and affirmative action, taken the university to court to challenge its refusal to recognize TA and RA rights to collective bargaining representation, and generally provided a strong voice of opposition to the university's often poorly aimed employee policy changes.

The Title Shuffle

The union is now fighting the university's efforts to change the current graduate instructor job categories—"as a trial measure," according to the draft memo from the graduate dean's office—from Teaching Assistant, various levels of Teaching Associate and Acting Instructor to Graduate Student Instructor (GSI) levels I, II, III and IV.

"It's one more administrative paper creation," Schamus said. "You never know whether or not it's real. But you can't call it imaginary because it can have devastating effects."

The policy claims to clarify a "misunderstanding" inherent in the old job categories, but the union sees it as a carefully-aimed retaliation to AGSE's legal challenge against the university.

Union members say it is no coincidence that the new policy not only attempts to change the names of the categories—which might render the outcome of the suit meaningless by the time it leaves the courts—but also directly attacks the strongest part of the union's case. AGSE asserts that by abolishing the Acting Instructor position—which does not require registration and thus most closely resembles a faculty position—and by setting a four-year cap on grad instructor appointments, the university is trying to undermine the union's argument that grad instructors are employees and strengthen its own case that their teaching duties are merely part of their education.

Legal Ambiguity

Although unions have been a staple of the American workplace for at least one hundred years, and since the 1930s have had the right to represent employees working in the private sector in bargaining a contract with their employer, unions in California higher education did not enjoy collective bargaining rights until 1979, when Governor Edmund G. "Jerry" Brown Jr. signed the Higher Education Employee-Employer Relations Act.

And although the law is quite specific regarding the rights of most university employees to unionize and negotiate contracts with the university, as both AFSCME-represented clerical workers and AFT-represented non-tenured faculty have done, student employees face a special obstacle—a section of the law so muddled that it effectively forces unions representing student employees to win a decision from the court.

The law states that student employees are covered "if the services they provide are unrelated to their educational objectives or if their educational objectives are subordinate to the services they provide and that coverage would further the purposes of this chapter."

"The language is purposely ambiguous," early AGSE organizer and former executive boardmember Richard Boyden said. "The university is responsible for putting this language into the act—it's a matter of historical record."

Students First

The university had from the union's founding staunchly insisted that grad student employees are students who teach or conduct research as part of their education, receiving a paycheck not for services rendered but as a form of financial aid. And administrators have taken great pains not to create the appearance that they are treating AGSE as a labor union.

Since the legal suit this past spring, the university has been more technical in its description, admitting that grad student workers are indeed employees, but not *HEERA employees.*

The university systemwide administration "has set a policy that students are not covered by HEERA," said former U.C. Berkeley Graduate Division Dean William A. Shack when AGSE first filed suit under HEERA two years ago.

"Their primary role is to get an education," Shack said. "And in very many cases, it is part of their education to teach.

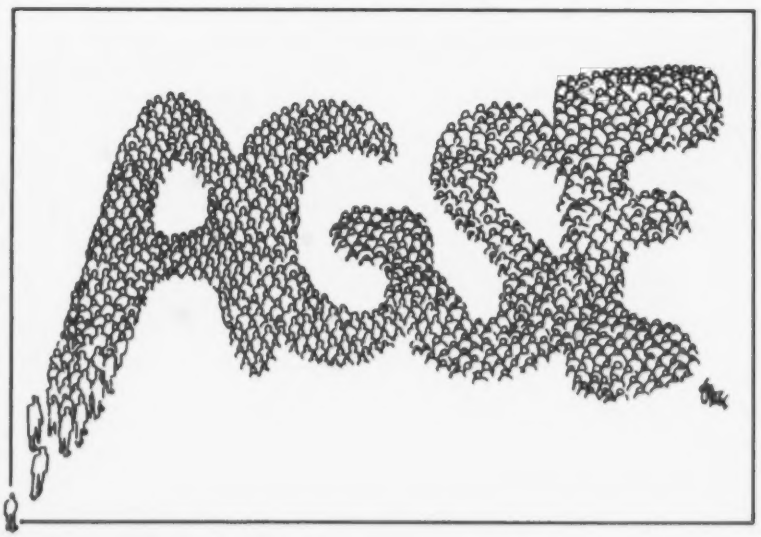
"I have found the students in my department who have had teaching experience make better presentations in job interviews and do better on the job. They have all seen it as a positive experience and even if they don't have to for economic reasons, they want to."

Collegiality

University administrators find the idea of a labor union functioning inside the halls of academe to be in distinct "bad taste." Administrators say "the adversarial role" into which unionization forces grad employees will interrupt the university's intellectual free-market. "Negotiations," and "grievance filing," they seem to think, will cast a pall of bitterness and dispute on what should, after all, be the gratifying and ultimately fulfilling pursuit of knowledge.

And a few of the more "traditional" professors at times seem to act as if their country club has been disturbed by the raucousness of an angry mob of unshaven, unwashed steel workers. As one faculty member sympathetic to the union said, "There is this view of a rising proletariat, a radical element, and to them that's always bad. There is a sense that it has no right to exist in our gentlemen's world."

Especially among the faculty, the university has always been a very "clubby" place; graduate students are "chums," "colleagues," who serve



as the wide-eyed Dr. Watsons to all the established and Nobel Prize-winning Sherlock Holmeses. And some faculty members argue that a union spoils the "meritocracy" that the university environment makes possible. A union forces the employer to treat all employees equally, with no advantage allowed for those who may be more talented, they say. Faculty critics of the union say the union undermines the prerogatives of the Academic Senate, and besides, they often feel that they can do more to help their students battle the university bureaucracy than a union can. Faculty members tend to be very protective, even paternalistic, toward their graduate students. As one professor said, "The whole purpose of having a graduate student is to reproduce a clone."

Which is not to suggest that this "collegial atmosphere," as it has come to be called, is necessarily a bad thing. Serving as an intellectual backboard to an older, more knowledgeable scholar in one's own field can be a very

enriching experience.

But the tradition of collegiality, with its appearance and perhaps reality of intellectual freedom, obscures a part of the university that many would rather not mention; namely classism and very powerful and well-established channels of informal authority. These elements point to another tradition at the university, with a history just as long—secretive and patronage-tainted tenure processes, the "old boy's network" for appointments and budgeting, and systematic race and sex discrimination.

Now some grad students are beginning to see "collegiality" as a euphemism for yet another facet of the university's darker side. They call it, in the words of one grad, "exploitation, pure and simple."

"When you actually look at it objectively, graduate students are an exploited class across the country," Boyden said. "There are thousands of them that are providing highly-skilled work, especially in the sciences, for real cheap."

But not all grad student employees feel exploited. For example, working in one of the many prestigious research groups at U.C. Berkeley can literally make a beginning scientist's reputation. According to one RA working in a well-funded research group at Lawrence Berkeley Lab, there are dozens of physics post-docs on the waiting list desperate for jobs similar to his, despite the low pay and long hours—because of the career opportunity they provide. "There are people who would give their right arm for my job," he said. "They would *pay* the university to work here."

Boyden said one problem the union faces trying to organize grad students, and not just research assistants, is that many grads think of their four or eight years at the university as "paying dues," after which they will be richly rewarded. "Grad students think of themselves as upwardly-mobile," he said. "They think of themselves as becoming part of the upper-middle class."

And because grad students are so isolated from one another, working long hours tucked away in their individual academic niches, Boyden said, they tend to judge the whole of the situation by their own particular experience. "People tend to have a worm's eye view," he said. "If they work for a professor and he treats them okay, then the whole system is okay."

But this parochial attitude is not the only reason some grads are reluctant to make their employment complaints public. There is a real fear of reprisal from the department or administration and many grads don't want to risk it. In a July 1985 *New York Times* article headlined "The Grad School Grind" in its *San Francisco Chronicle* reprint, Susan Rasky writes: "none of the five hard science graduate students interviewed on the subject were willing to be named; some asked that not even their universities be identified. Several said they considered their conditions of work and relations with advisors so sensitive that they feared even an anonymous comment might subject them to reprisals and threaten grants or job placement. As one student put it: 'It's a feudal system in the sciences, arbitrarily good and bad.' "

"Our problem is not that different from other workers," Boyden said. "There is a lot of fear. There is a lot of highly rational fear."

And grads are in a very weak position to defend themselves against reprisals or against the long hours, little pay and even less credit they face in the course of their work, because not only do they have the least institutional power in the entire academic bureaucracy, but they also in many cases work directly for the people who have the most influence over their future. In a specialized field—and almost all are these days—there may be only a handful of professors for a grad student to work with. Three of them are going to be on the grad's orals committee. And if the TA is to get a teaching job someday, at least a few of them are going to have to make a positive written or oral recommendation. "Exploitation" is not exactly a word that gets shouted around in the department very often.

This difficult spot into which the university puts a grad student has made the union popular, not necessarily because of any promise of higher pay and greater benefits, but because AGSE serves as a vehicle for TAs and RAs to discuss their common employment concerns with each other and the university.

"When the union first formed, the university was in a financial crunch," said Robby Cohen, one of the founders of AGSE and a member of the first executive committee. "And there was speculation that when the hard times were over there would be no more need for the union."

But union members now say that the powerlessness of grad students at the University of California makes AGSE a necessity whether in fat times or lean. Because of the low position of RAs and TAs in the organizational hierarchy, and the lack of control grad employees have over their conditions of employment, union members say, AGSE is essential. As one member said, "Out here, it's organization or death."

Anti-Parochialism

Beyond the political function the union

serves, by organizing graduate students from diverse academic fields, AGSE has had what many grad students consider a very positive social and intellectual impact on the graduate community.

"It makes you a lot less parochial, intellectually, as well as socially and politically," said former AGSE executive boardmember Rebecca Hyman. "When you do graduate work, you work in this very narrow field. And you get very narrow in your approach to problems if you don't have contact with other people."

"It's amazing the change that takes place with grad students when they get involved in this thing," Schamus said. "It's so exhilarating (to break out of) your own little departmental monastery."

The Early Days

The Association of Graduate Student Employees was formed in the fall of 1982, when members of two graduate student groups happened to see each other's flyers posted up around campus and decided to call a joint meeting. Each group had been meeting for months, but because grad students have a habit of sequestering themselves in their departments, just discovering that another group existed was a major bit of luck. AGSE met throughout the fall, but the real fire wasn't lit until the following spring.

"What really did it was the $100 fee boycott," Boyden said. In February 1983, a group of undergraduates organized an almost spontaneous rally and boycott of classes to protest a fee surcharge imposed by the university because of the "economic crisis in higher education."

This "fee extortion" pumped up political activity on campus, and although AGSE was not yet a very powerful or well-known organization, a couple of graduate departments with wild-cat enthusiasm threatened their own action against the university.

"In the Italian Department, the TAs were so pissed-off about the $100, all 15 of them—the whole Italian instruction department at U.C.—told the administration they would not pay it," Boyden recalled. "They were threatening to strike, but with no organization (AGSE was not then a union) they caved in at the end and paid it."

And the History Department grad student association suggested in its newsletter that department teaching assistants hold classes off campus on the day of the boycott. The department chair found out and threatened the writer of the newsletter (the chair was on his orals committee), the whole incident got into the press, and the entire department of grad students ended up outraged at the chair, Boyden said.

On March 15, 1983, graduate students at the AGSE meeting started talking union. The meetings were getting larger and the graduate students—leading them to take a more active role in student government.
more politically experienced element within the organization.

"I was completely disgusted by the amateurish way they were running the meetings," said one future member of the union executive committee. "It was an all-thumbs, sophomoric thing."

The growing faction in favor of unionization called a "vote to unionize" meeting for the next month, April 28, 1983, and there 230 grad students voted to form a union.

(One reminder of the old non-union AGSE, which made all decisions by consensus, is the current 10-member executive committee. The relatively large committee arose as a compromise between the consensus group, and the group that wanted a smaller and more responsive steering committee.)

First Action

As soon as the union formed, members fired off a letter to the university personnel office requesting a meeting to begin negotiations on work conditions. After a month's consideration, the university responded by saying it could not "meet and discuss" with AGSE because it was a student group, not a labor union.

"We believed that the administration's position was dead wrong," Cohen recalled, "We knew the university had a legal obligation to meet and discuss with its employees, and we were employees. So we decided to march down to the personnel office."

At that time copies of the grievance procedure were not routinely provided to grad employees and many grad instructors had never seen a job description. Grad student pay levels (which had not changed for several years) had by 1983 been seriously eroded by inflation and rapidly increasing student fees. As Cohen recalled, "We had some real grievances."

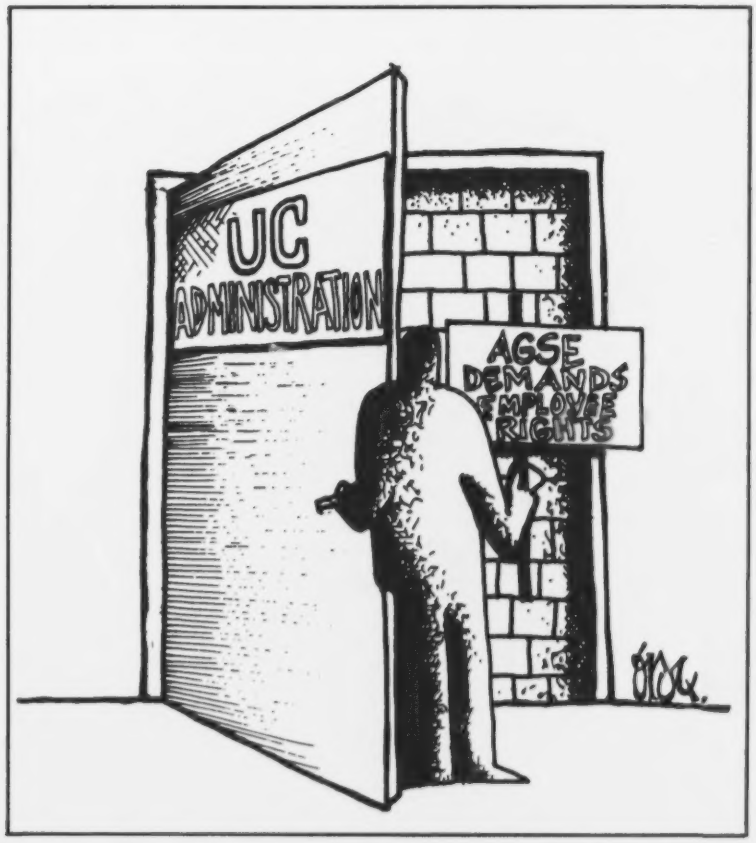
So the union called out approximately 300 of its members, who, led by a banner which declared "WE ARE NOT ACADEMIC SERFS," marched through Sproul Plaza and up Telegraph to the university personnel office on Channing Avenue.

"People had never seen anything like this—grad students marching. It was a really very moving experience."

When 300 grad students singing union songs to an accompanying banjo reached the office,

two burly U.C. police guards sealed the door. (Cohen said that one officer—the police officers were in the midst of a decertification election at the time—leaned over and said "We're going to ride in on your coattails.")

Demanding to talk to the author of the letter—U.C. personnel officer Deborah Harrington, who was not at her office at the time—the union's negotiators told the police they would remain in front of the personnel office until she appeared. After one of the guards made a call on his radio, "she came trotting in." Harrington initially refused to meet until the group stopped singing, but within a few minutes AGSE representatives were having their first meeting with her.



"For a long time afterward, the spirit of protest, this elan, invigorated people. The march was a real rejection of this pipe-smoking, tweed-coated mentality that grad students of the '80s were supposed to be into," Cohen said.

'Negotiations'

Following the march, the union began to hold what it considered negotiations with university representatives. The university had a different name for them—"discussions." Ever conscious of HEERA—and especially in the beginning, university officials would claim that the law *prohibited* them from treating AGSE as a union, when at best the legal ambiguity simply made the association's status unclear—the university began talks with the union but would not at first allow records to be kept and insisted the meetings were purely "informative."

The two parties finally agreed that written notes could be kept, but with both sides having to agree on the final result. The university insisted, however, that these notes could not be considered transcripts, and spoken promises could never be pinned down. "Nothing in writing," was the university's strict policy.

Although this infuriated union members, through spring and fall of 1983 AGSE had worked out with the university a plan for paying fees by installment (first in three installments, then three with an option for four, and finally five), prompted the university to hire a "late paycheck expediter" and finally had the university distribute the grievance procedure to all grad employees.

The following spring, 1984, these talks broke down. The university changed posture on the installment plan, withdrawing it and offering university loans in exchange. AGSE by this time had filed a formal grievance with the state Public Employer-Employee Relations Board and in the wake of a PERB decision in favor of U.C. San Francisco interns, who had challenged the language of HEERA in much the same way the AGSE suit would, the university decided that any policies that looked like they were the result of union-university negotiations would weaken the university's case.

AGSE *vs.* the Regents of the University of California

As soon as AGSE became a union in the spring of 1983, the group sent a letter to the university requesting "meet and discuss rights" and voluntary "dues check-off" from employee paychecks, two privileges guaranteed any group of employees that falls under a unionizable category. The university, however, denied these requests. In November of that year the union filed a formal grievance with PERB, the state labor conciliation board set up to adjudicate HEERA conflicts.

Hearings began in the spring of 1985, and after nine weeks of testimony, the PERB hearing officer packed up a stack of documents and began preparing his decision, expected in the fall.

"The case serves the purpose of clarification of whether student employees have legal rights under HEERA," said Denise Abrams, who worked as a legal aid to AGSE and now holds an

office in the Graduate Assembly. "But if this case is resolved against the union," she added, "it doesn't mean that AGSE is less a union in the eyes of the workers, because they know they are employees."

Even before HEERA gave them the right to act as collective bargaining agents for California higher education employees, unions were active on the U.C. Berkeley campus. From 1965 to the early 1970s, AFT 1570, a local affiliate of the American Federation of Teachers, served as a very effective graduate student union at U.C. Berkeley. The official university grievance procedure for TAs and RAs, which is still in use today, was won by AFT 1570.

In the course of the AGSE hearings last spring, the university agreed to recognize the more than 500 readers and tutors at U.C. Berkeley as a group with full collective bargaining rights; although AGSE has not yet done so, it can now legally file for an election and, if it wins, begin contract negotiations with the university for these groups.

But teaching and research assistants and associates and acting instructors will have to wait for the hearing officer's decision. The case will almost certainly drag on further, since there is the possibility of an appeal to the full board and even, as the university has done in the past, to the civil courts. When the San Franciso Interns and Residents, won an analogous case before PERB, the University appealed. The case has gone to the California Supreme Court, which heard oral arguments last spring and will probably come to a decision this fall. In light of this precedent, if PERB rules in AGSE's favor, Abrams said, "I doubt the university will sit tight on that."

Although the case may be unresolved for quite some time, in preparing AGSE's legal case, the union discovered a wealth of information about how the university runs, Abrams said.

AGSE attorney Suzanne Marria said testimony and evidence from the hearings "confirmed what many graduate students already knew: a majority of undergraduate teaching hours are taught by graduate student instructors." And Marria said the testimony showed that graduate students performed a surprising amount of the research at the University of California as well. "If graduate students weren't at Berkeley doing the kind of research they do," she said, "the university would not be able to attract the level of faculty it can now, and it would not enjoy the same reputation."

And both Marria and Abrams said the testimony showed that grad students really support the multi-million dollar U.C. Berkeley research institution, not only through their labor, but by writing the grants that provide the overhead to keep the labs running.

"In many cases a graduate student will . . . do the majority of the work so faculty members, as principle investigators, can have three or four projects going at once," Marria said. "(And) several grad students, in several (hard science) departments, testified that they had written a grant that went in under their professor's name."

"It's not academic hearts and flowers," Abrams said, "A lot of big business goes on."

AGSE also discovered that many of the complaints the union had heard about violations of graduate employee rights were even more widespread than had been imagined. A surprising number of graduate employees reported that they had to do work not required by their job descriptions—readers forced to teach sections, TAs teaching the professor's class—Abrams said.

The Bates Bill

In spring of 1984, Assemblymember Tom Bates, D-Berkeley, agreed to sponsor an amendment to HEERA which would have removed the ambiguity of the section concerning student employees so grads would be expressly covered by the act. This bill would have made the legal case unnecessary, potentially saving the union thousands of hours and dollars of legal work. But despite hundreds of hours of lobbying and organizing, opposition in committee and Assemblymember Bates' unexplained absence on the crucial day of introduction left the bill dead in committee.

AGSE's Political Role

Since its founding more than three years ago, the union has changed the shape of the political environment for graduate students. The organization ties together the departments—bringing grads out of their academic cloisters, unifying them as a political force. For example, in the years since AGSE started, the Graduate Assembly has undergone dramatic changes because the union has helped politicize graduate students leading them to take a more active role in student government.

Formerly an almost invisible "campus service" organization, the Graduate Assembly in the past year and a half has become extremely active on a number of political fronts— fighting for campus affirmative action, building local support for the sanctuary movement, spearheading the 20th anniversary commemoration of the Free Speech Movement, and lobbying for greater university funding for graduate student educational programs.

"Since the founding of AGSE the concerns of graduate students have been articulated to the administration in a way that made it impossible for them to ignore. Because of AGSE the Graduate Assembly has improved in both its representativeness of graduate students and its ability to defend their interests," said ASUC President Pedro Noguera, who last year chaired the GA.

And the union has thrown its weight behind other broad-based campus movements like the divestment campaign last semester. Ross Frank, a member of the union executive committee, said the underlying goals of many of the progressive movements on campus are directly in line with the union's goal of establishing "a democratic foundation of policy at the university."

Undergraduate Education

The working conditions of grad students, union members point out, have a direct impact on the quality of education undergraduates receive.

"Grad students are responsible for at least 50 percent of the contact time undergraduates get in the course of their education. The kind of employment pressure put on grad students has a great deal to do with the care and thought that goes into the preparation for their classes," Frank said.

Frank said that some of the university policies the union is fighting, such as the proposed four-year cap on grad student teaching, clearly effect the variety and quality of courses available to undergraduates.

"It's a funny kind of symbiotic relationship between the graduate student's own workload and the kind of education undergraduates receive."

'Nuts and Bolts'

Although the union has in the past taken a very active role in campus politics, its main focus has been, and will continue to be "nuts and bolts" union issues, said AGSE executive boardmember Anne Vallerga.

Vallerga, a grad instructor in the Endocrinology Department, said one of items at the top of the agenda for next year is improving the health and safety of U.C. Berkeley's labs.

"I took a small survey of science students and they're very worried about safety in the labs," Vallerga said. "I think it's going to be a hot item in the coming year."

She said the union will continue representing the interests of grad employees in the face of university policy changes as well as gather information and lend support to progressive campus political movements.

With the odds seeming to be so stacked in the favor of a very wealthy and powerful university bureaucracy that in the past has repeatedly demonstrated its willingness to go to almost any length to keep a graduate union from flourishing on the U.C. Berkeley campus, Vallerga was asked what lies in store for the union this next year:

"We're going to have some rough times in the future, but I have this feeling that this next year is going to be a good one. I don't know what we can do, but we can sure make some noise."

—David Pickell

The Job Title Shuffle

Every year the Graduate Assembly's TA handbook publishes the official University job descriptions and salaries for graduate student teachers at U.C. Berkeley. In the past, this part of the Handbook was simple and straightforward: we re-printed the employment information supplied by the U.C. Berkeley Graduate Dean's office. This year, however, the status of graduate employee job descriptions and salaries is ambiguous. Over the summer of 1985 Vice Chancellor Roderic Park attempted to institute a new system of job categories for graduate students employed as teachers at U.C. Berkeley. At press time, it was still uncertain whether Park's new classification system or the old one would be in effect during the 1985-86 academic year.

We are publishing *both* the new and the old job descriptions and salary schedules so that you will have this critical employment information available regardless of which job classification scheme prevails. The old job classifications were sent to us by the Graduate Dean's office in late May, and the new ones are copied from Vice Chancellor Park's memo dated July 30, 1985.

Grad Job Categories and Salaries

Teaching Assistant

Teaching Assistants are registered graduate students in full-time residence, chosen for their excellent scholarship and for their promise as teachers, and serving under the supervision of regular faculty members. They must have a minimum GPA of 3.1.

A Teaching Assistant is not responsible for the instructional content of a course, for selection of student assignments, for planning of examinations, or for determining the term grade for students. Neither is a Teaching Assistant to be assigned responsibility for instructing the entire enrollment of a course or for providing the entire instruction of a group of students enrolled in a course. The Teaching Assistant is responsible only for the conduct of recitation laboratory, or quiz sections under the active direction and supervision of a regular member of the faculty to whom final responsibility for the course, including the performance of the Teaching Assistants, has been assigned.

Teaching Fellow

A Teaching Fellow is a registered graduate student in full-time residence who has advanced to candidacy for the doctorate, or otherwise has achieved appropriate professional maturity, and who has been chosen because of competence to conduct the entire instruction of a group of students in a lower-division course under the general supervision of a regular faculty member. A master's degree is required when appointed in one of the two professional schools. A minimum of two years teaching experience is required, as well as a strong B+ grade point average.

Teaching Associate

The title Associate is assigned to teachers employed temporarily and not under consideration for appointment as instructor or professor and whose services (either full-or part-time) are contracted normally to have independent instruction in lower-division courses.

An Associate who is a graduate student must register full-time to hold this title unless she or he has completed the degree objective and has formally discontinued all studies at the University. The minimum qualifications for appointment to the title Associate shall be possession of a master's degree or equivalent training, at least one year of teaching experience, and a minimum GPA of 3.4.

Acting Instructor

The title Instructor is limited to persons engaged in teaching or research or both, who devote virtually their entire time to such work. Minimum requirements for the Acting Instructor titles are advancement to candidacy and two years of college level teaching experience. Acting Instructors may teach a course at any level in which case review by the Committee on Courses is necessary when the assignment is to teach an upper division or graduate course.

Reader

The title Reader is given to a student employed for the ability to render diverse services as "course assistant," which will normally include the grading of student papers and examinations. A Reader will not be given the responsibilities customarily accorded a Teaching Assistant.

Readers will usually be graduate students, but qualified undergraduate students may be so employed, especially when graduate students are not available. Professional Readers, not enrolled as students, may be employed to meet special needs, but only on an hourly basis.

Readers should have maintained at least a 3.0 GPA in their previous academic work, and should have taken and received at least a B average in the course or equivalent in which they are serving.

Terms of Appointment

Teaching Assistant, Fellows, Associates, and Readers: Appointment is for one academic year or less, and is self-terminating unless the appointee is otherwise notified. Notice to this effect must be given on the employment form.

Appointment to the title of Teaching Assistant, Associate or Fellow may not exceed half-time, nor may such appointment in combination with other employment within the University exceed half-time. (Those employed half-time should be expected to devote, during instructional and examination periods, sixteen to twenty hours per week including time spent in preparation, classroom and laboratory teaching, office consultation, and reading student papers.) Exceptions to this rule may be made with special approval of the individual case by the Dean of the Graduate Division upon recommendation of the department chair and the dean of the school or college.

The total length of service rendered in any one or any

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combination of the following titles may not exceed four years: Reader on annual stipend, Teaching Assistant, Teaching Fellow, and/or Associate. Under special circumstances, the Dean of the Graduate Division, upon recommendation of the department chair and the dean of the school or college, may authorize a longer period, but in no case more than six years.

Acting Instructor: Each appointment as Acting Instructor is for a specified term, not to exceed one year. The total period of service is limited to two years.

Minimum Program Required

It should be remembered that Teaching Assistants and Associates are expected to carry a minimum of 6 upper-division or graduate units per semester unless the department is given permission by the Graduate Division for an individual student to take fewer units because of special circumstances.

SALARY RATES EFFECTIVE JULY 1, 1985
(Under old job titles, according to the Graduate Division)

Title	Annual	Monthly	Hourly/Per Semester
Teaching Assistant	$18,630	$1863	$4657.50
Associate			
1 Year	$19080	$1908	$4770
2 Years	19860	1986	4965
3 Years	20748	2074.8	5187
4 Years	21660	2166	5415

Reader: $7.11/hour **Tutor Single:** $7.11/hour **Tutor Group:** $9.63/hour

Do not confuse salary with usable income since in order to be a TA, registration fees must be paid.

Revised Grad Job Categories and Salaries

Effective July 1, 1985, all graduate students serving as teacher trainees will be appointed to the title Graduate Student Instructor. The titles Teaching Assistant and Associate will no longer be used except for payroll purposes.

Definition

A Graduate Student Instructor (GSI) is a trainee student member appointed temporarily by an instructional department using one of the following payroll titles: Teaching Assistant (Title Code 2310) or Associate in _____ - Graduate Student (TC 1501 and 1506).

Qualifications

All Graduate Student Instructors must be registered graduate students at the University of California, Berkeley campus, have earned a minimum GPA of at least 3.1, carry a minimum course load of 6 units, have no more than two "incompletes," and make continuous and satisfactory progress toward the degree. Appointment and promotion to the steps of the GSI salary range are dependent upon a thorough review of academic performance, progress to the degree, teaching experience, and level of responsibility in the teaching program. Departments may set their own appointment and promotion criteria within the following guidelines.

a. All appointments of students with no appropriate college teaching experience should be at GSI Step I. Such students should have earned a GPA of at least 3.1.

b. Appointment or promotion to GSI Step II requires four regular semesters of satisfactory college teaching, a minimum GPA of 3.4, and continuous and satisfactory progress to the degree.

c. Appointment or promotion to GSI Step III requires a minimum of six regular semesters of outstanding college teaching, a minimum GPA of 3.4, and demonstration of continuous and satisfactory progress to the degree.

d. Appointment or promotion to GSI Step IV is reserved for those students who have been advanced to candidacy for the doctorate, have a continuing record of outstanding college teaching, have earned a minimum GPA of 3.4, and will have a teaching assignment involving exceptional responsibility.

Exceptions to these guidelines may be granted in unusual cases based on qualifications and performance attributes related to academic work and teaching.

Term of Appointment

Appointment as a Graduate Student Instructor in combination with other University appointment may not exceed half-time. The total length of service as a GSI *may not exceed four years* at any percentage of time, unless authorized by the Chancellor on an exceptional basis.

Conditions of Appointment

A Graduate Student Instructor is normally assigned to a recitation, discussion, laboratory, or quiz section under the supervision of a faculty member in charge of a scheduled course. After appropriate experience and within established policies, a GSI may conduct the instruction of a lower-division course under the general supervision of a regular faculty member.

Under exceptional circumstances, and with the approval of the Graduate Council and Committee on Courses, a GSI may teach an upper-division course.

Salary Scale & Progress Through Steps

Graduate Student Instructors shall be paid at salary rates set forth on the attached salary scale for 1985-86. The salary scale includes four steps and the normal period of service at a given step is two years. Initial appointment will normally be at Step I. Appointment and promotion to Steps II, III, and IV will be based upon the guidelines noted above under Qualifications.

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GRADUATE STUDENT INSTRUCTOR 1985-86 SALARY SCALE
(Under Vice Chancellor Park's Proposal)

	Normal Period At Step	July 1, 1985 Full-time Annual Rate*	July 1, 1985 50% Rate	January 1, 1986 Full-time Annual Rate*	January 1, 1986 50% Rate	Payroll Title Codes
GSI Step 1	2 years	18,630	9,315	19,170	9,585	TC 2310
GSI Step 2	2 years	19,600	9,800	20,200	10,100	TC 1501 or 1506 (Assoc)
GSI Step 3	2 years	20,600	10,300	21,200	10,600	TC 1501 or 1506 (Assoc)
GSI Step 4	—	21,800	10,900	22,800	11,400	TC 1501 or 1506 (Assoc)

*Actual payments will be at 50% time (or less) for the academic year, in 10 equal installments. Also, do not confuse salary with usable income since in order to be a TA, registration fees must be paid.

University Employment Policies

The following is a summary of official University policies regarding the privileges, rights and obligations of graduate students employed as teachers at U.C. Berkeley. Many of these policies are abstracted from the University of California's *Academic Personnel Manual*. Others are policies formulated by the Graduate Division and Graduate Council. Additional information about procedures and policies regarding graduate student employment can be found in the *Graduate Advisor's Handbook* (available for review in most department offices, in the Graduate Division, and in the Graduate Assembly office).

Employment Procedures

All student employment is initiated within the department. It is the responsibility of the office of the Dean of the Graduate Division to see that such employment is in order with regard to the details of the position offered and with regard to the academic qualifications of the student employee.

Tax Status

Although a form of fellowship, TA wages are deemed taxable under IRS Code Section 117. The University is required by law to withhold federal and state tax from TA salaries.

TAs may qualify for tax refunds if their departments designate teaching experience as a requirement for the receipt of the degree. Students in the following departments may be eligible for tax refunds:

Astronomy
Biochemistry
Botany
Chemical Engineering
Chemistry
Classics
French
Geography
Microbiology & Immunology
Music
Neurobiology
Philosophy
Physiological Optics
Physiology/Anatomy
Psychology
Rhetoric
Zoology

To claim a refund, the student must have registered in a degree program the semesters claimed. No claim may be made for any semester in which the student was in "Filing Fee" status (a status describing specific students in the final status of completing an advanced degree). Claims for a refund should cover only those periods of teaching which were performed to satisfy the requirements of the degree program.

Those students who wish to file for a refund should request their department to complete the certificate forms provided by the Graduate Division for TAs claiming federal income tax refunds. Certificates should be attached to the state and federal income tax forms to ensure due consideration.

Medical and Health Insurance

TAs are not covered by University health insurance plans. Instead, as registered students, they may make use of the Student Health Service located in Cowell Memorial Hospital.

Vacation and Sick Leave

TAs and other academic staff appointed on a nine-month basis do not accrue vacation or sick leave credit. The University expects them to be in residence on the Berkeley campus from the first day of the semester for which they have been appointed to the last day of that semester.

Termination

According to the *Academic Personnel Manual*, a TA's appointment is for one academic year or less, and is self-terminating unless the appointee is otherwise notified.

Teaching Assistants may be terminated prior to the expiration of their appointments only for good cause: incompetence or incapacitation of the person, misconduct resulting in disciplinary action, or budgetary reductions or program changes.

Grievance Procedure

A Teaching Assistant with a grievance about her or his employment has recourse to two appeal procedures. *The Berkeley Campus Appeals Procedure for Non-Senate Academic Employees (Campus Procedure)*, as described in the *Academic Personnel Manual*, provides the formal mechanism for grieving arbitrary, capricious, or unreasonable actions by administrative officers, other than those pertaining to title or salary increase actions. This procedure does not apply to non-discretionary

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actions such as terminations arising from the discontinuance of funding for a program. Complaints not presentable under the *Campus Procedure* may be presented through the normal administrative channels up to the Chancellor.

The *Campus Procedure* involves three steps. At any step, the grievant may be assisted by a representative of her or his choice (including legal counsel). The first step involves an attempt to arrive at a solution through informal personal discussions with the grievant's immediate supervisor, to commence no later than thirty days from the time of the grieved act (fifteen days in case of termination). The supervisor must provide a response within ten days of the discussion, and any appeal to Step Two must be brought within ten days.

Step Two involves submission of a written statement of the grievance to the appropriate dean. This statement should describe the action, practice, rules, and policy involved and the corrective action desired. The Dean will then investigate the matter, conduct a meeting with the supervisor and the grievant, and make a formal decision in writing within ten days of receipt of the grievance. Appeals of this decision at Step Three must be made within ten days to the Dean, who then advises the Provost and coordinates the Step Three hearing.

The Step Three hearing involves one of three alternative procedures, at the option of tthe grievant: (a) a hearing by a three-member committee: (b) a hearing by a Personnel Appeals Officer: or (c) a hearing by an outside Advisory Arbitrator. The three member hearing committee must include at least one non-Senate academic employee member and is appointed by the Chancellor. The Personnel Appeals Hearing Officer is selected at random from a list of at least three qualified hearing officers appointed by the Chancellor. The arbitrator is chosen through an elimination procedure from a list of five arbitrators submitted by the American Arbitration Association.

The decision of the committee or hearing officer is advisory to the Chancellor, who in turn is required to issue a final decision in writing within ten days of receiving the report and recommendation. The determination of the arbitrator is final and binding unless disapproved by the Chancellor within ten days of receipt of the decision. If disapproved, the reasons must be stated in writing and the University must pay for the entire cost of the arbitration; if approved, the cost of arbitration is borne equally by the grievant (or the grievant's representative) and the University.

Under each of these three procedures, the hearing is conducted according to the rules established by the particular forum, including certain basic procedural guarantees. Both parties are entitled to representation by counsel, to present evidence and cross-examine the witnesses of the other party, and to request and examine pertinent records and documents. Adequate notice of the time and place of a hearing must, of course, be provided by both parties. The grievant may provide for a stenographic record of the proceeding at her or his expense.

Academic Grievance Procedures

The Graduate Council sets out policies regarding academic progress for graduate students at Berkeley: general standards for the award of graduate degrees, the conditions and procedures to be followed by students, faculty, and the Graduate Division. The Graduate Council also resolves disputes over actions that impede or terminate a student's progress toward her or his degree goal. These policies and procedures are described in the document *Academic Progress Evaluation, Academic Standing, and Appeals Procedures for Graduate Students.* A copy of this document may be available in your department or in the Graduate Assembly.

Facilities and Privileges

Most departments can provide their Graduate Student Instructors with shared office space or laboratory space. Items such as desks, mailboxes, file space, typewriters, supplies, and duplicating services are also generally supplied.

Evaluation of Performance

All teaching assistants should expect to have their performance evaluated periodically since evaluation of teaching performance is essential to maintenance of the quality of undergraduate instruction. Each department handles the evaluation of its TAs differently. It is the responsibility of the TA to be aware of the procedures involved in teaching evaluation. A faculty member who is responsible for the course may visit a TA's section periodically. In addition, student evaluation questionnaires may be used as a means of evaluating teaching performance. Teaching assistants have the right to review these evaluation forms, since one of the primary purposes of teaching evaluation is to give the teacher information which can be used specifically to improve teaching performance. Teaching assistants should also be aware of teaching evaluation methods which can be used specifically to improve teaching performance. These methods include peer evaluation (visits to a TAs class by a TA collegue) or videotaping of the TA's teaching.

Departmental Policies

Although the University has formal policies regarding teaching assistants, the primary responsibility for administering these policies lies with individual departments. The department chair is ultimately responsible for assignment, supervision, and evaluation of all TAs in the department. All TAs should check with their department offices to determine how policies and procedures regarding teaching assistants are interpreted and administered. Many departments have established additional guidelines for their teaching assistants and make those procedures available in mimeographed or handbook form.

The Graduate Division and the Graduate Council

The Graduate Council is a standing committee of the Academic Senate which is responsible for establishing and reviewing all policy that relates exclusively to graduate education.

The Graduate Division is the administrative agency of the Graduate Council. Most graduate petitions and TA employment forms are administered here.

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REMOVAL EXPENSES

If you were appointed a TAship before coming to Berkeley as a graduate student and this appointment was awarded for a full academic year, you may qualify to receive removal expenses, providing you had to travel to Berkeley from a point of origin outside California. Reimbursement for travel from points of origin within California is not authorized.

To apply for this money consult your department chair or graduate secretary. You will need to fill out a Check Request Form 5 which your department should have on hand. The form must be signed by you and your department chair.

The Accounting Office, Travel Division (324 Sproul, 642-3308 or 642-0438) allocates this money and will be able to answer questions you may have about obtaining removal expenses.

Removal Expense Allowance	Approximate Air Miles from Point of Origin to U.C. Campus
440.00	2,400 and over
355.00	1,800 to 2,399
280.00	1,300 to 1,799
225.00	900 to 1,299
160.00	under 900

Signing the Oath

You're probably thrilled to have just gotten your new job as a TA—the money, the glamour, the experience. Most of all, the cash, of course. But you may be surprised to find that to get that cash from the state, you have to sign a loyalty oath promising that you won't take part in the revolution until you've moved on to another job.

However, you are not the only victims of this pledge. All 120 million employees of the state of California are required to make the following oath:

"I do solemnly swear (or affirm) that I will support and defend the Constitution of the United States and the Constitution of the State of California against all enemies, foreign and domestic . . . that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties upon which I am about to enter."

Anyone who refuses to sign this oath can be denied his or her salary and job, and anyone who has done work for the University before signing this oath can be denied pay for the work done before signing.

It's a strange and anachronistic requirement, especially since it comes from one of the world's greatest universities. It is a shameless infringement of academic freedom, if not of the rights guaranteed by the First Amendment to the Constitution. "It's nonsense," said one TA. "It focuses on the wrong people. The people who balk at signing something like that have at least a sense of morals or ethics."

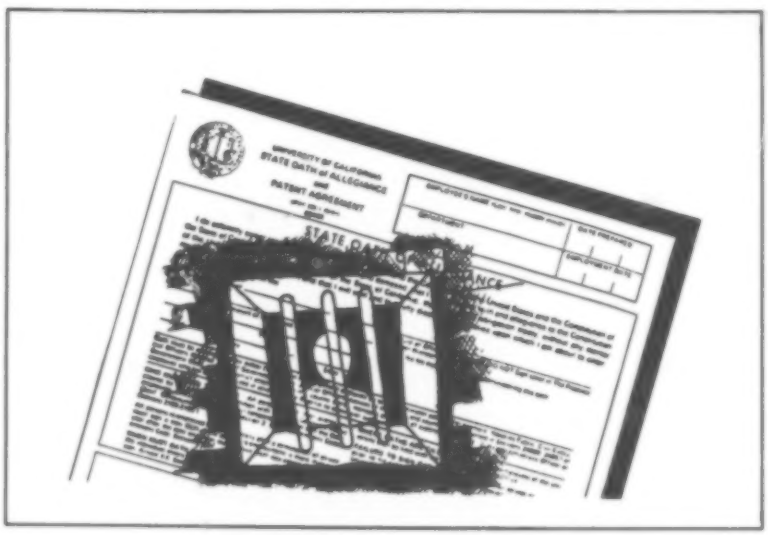
And most TAs agree that the oath does little more than give the Legislature or other police-state types a sense of security. "Really, what's the point?" another TA said. "Anyone who would plan a violent overthrow of the United States would have no moral compunction against lying on the form." But remember, this is California, the state that unleashed Richard Nixon and Ronald Reagan on the nation.

Most TAs and faculty who are forced to sign it just ignore it as a bit more of the usual bureaucratic swill. "I cross my fingers when I sign it," one TA said. "I actually make good use of it in my class. When I teach my students about (Sen. Joseph) McCarthy, I tell them about the loyalty oath and we discuss its constitutionality. Most students agree it's a violation of First Amendment rights." When the oath was first proposed in 1949, while the country was shaking in the first fits on Cold War hysteria, a majority of the faculty agreed.

State comptroller James H. Corley, the University representative to the State Legislature, first recommended a loyalty oath in January 1949 as a way of staving off the passage of any legislation that might be dangerous to the University. On March 25, President Robert G. Sproul presented a draft

which added to the California state oath a clause stating, "I do not believe in and am not a member of nor do I support any party or organization that believes in, advocates or teaches the overthrow of the United States government by force or violence." The Regents had already adopted an anti-communist policy in 1940, so it was hardly surprising when they unanimously approved Sproul's proposal as a requirement for employment during the following academic year.

But the faculty did not. On June 14, only three days after the oath requirement had been released to the faculty, the Academic Senate passed a resolution requesting the President to inform the Regents that "although unaware of any conduct which warrants doubt about their loyalty and zeal," the faculty requested the anti-communist provision be deleted or revised in a manner acceptable to the faculty. The Regents



met again on June 24, supposedly accepting an Academic Senate alternative, which stated that the faculty member or TA was not involved in any activities that conflict with the state-required oath—but in the middle of it they inserted a clause asserting that the faculty member signing was "not a member of the Communist Party." At least half the faculty again rejected this proposal.

But by the next month, it was obvious that contracts for employment the following year were only being given to those who had signed the oath. Some gave in and signed, though during the following months of heated debate between the faculty and the Regents, some requested that their oaths be returned so that they could stand with the non-signers, some of whom were TAs. A defense fund was established for the non-signers, and funds poured in from around the country: 245 protesters at Stanford signed a letter of support and sent considerable contributions, and professors at the University of Chicago voted to send two percent of their salaries to the protesters.

On April 21, 1950, the Regents finally rescinded the requirement forcing professors to sign the oath—seemingly a compromise victory for the protesters and essentially the end to "the Year of the Oath"—but the essentials of the oath were transferred to the body of the faculty's employment contracts. The final language essentially mucked together the original Regents' oath with all of the compromises written afterwards in such vague language that most of the faculty could accept. However, 48 professors who never signed it were essentially ostracized from the University community, and never worked for the University again.

Those employed by the University of California still had to swear that they were "not a member of the Communist Party or any other organization which advocates the overthrow of the Government by force or violence," and that they had "no commitments in conflict with (their) responsibilities with respect to impartial scholarship and free pursuit of truth."

Earlier, President Sproul had told the Academic Senate that the oaths were merely "aimed at the Communist Party alone." Faculty members, however, considered the oath an infringement of academic freedom—the freedom, within an educational instutution, to exchange openly all ideas and convictions, no matter how unpopular.

Now, most accept the current watered-down version of the oath and ignore it, though some feel it could be dangerous if anyone ever wanted to use it for something more than keeping the Legislature and the Regents happy.

"It may seem like a joke, but it is a specter hanging over us," said one faculty member. "If Ronald Reagan decides to pull out all the stops, it could be used against people."

—Will Miner

VII Instructional Resources and Services

Most TAs find that at some point they face an apparently insurmountable problem. This occurs not only because many TAs are unfamiliar with the services available to them as graduate students, but also because undergraduates expect their TAs to give them advice on subjects ranging from the most cost-effective mixed drink to the most politically correct career. Some of the problems you may face are potentially serious, but don't panic: campus resources are available to help you, to help your students, and to help you help them.

At UC Berkeley, figuring out where to go or send students for assistance or advice may in itself pose a problem. Berkeley offers so many different services in so many different places that finding out which office or person can help you can be more time-consuming than researching a seminar paper. This section of the handbook is designed to acquaint TAs with the many campus resources available to them and their students. A little time spent perusing this section now will save you time later.

The TA as Adviser

The following services can help you assist students with personal and academic problems.

The Counseling Center

The Counseling Center (Building T-5, 642-2366) is open Mon-Fri, 8am-5pm, and offers both individual and group counseling on educational, vocational/career, and personal issues. Counseling may include the use of standardized tests of interest, aptitude, and personality characteristics. The Center's library (open to all students) has an extensive collection of occupational and educational materials in addition to catalogs of colleges, professional schools, and technical schools.

Some students turn to their TAs to solve their personal problems.

Counselors at the Center are professionally trained and experienced in counseling and clinical psychology. Center services may be used before and during enrollment, and for transitional planning when leaving campus.

The Center staff will also consult with TAs on how to deal with students' educational or personal problems, and when and how to refer students for counseling. For a consultation on service and referral methods, call the Counseling Center and ask to speak with a coordinator, a staff psychologist, or the director. TAs from a single department or from several departments may also arrange for CPS to hold workshops on specific issues. Last year Dr. Wanda Lee held a workshop on "Problem Recognition and Referral for TAs," which many found helpful, and would be willing to present the program again if TAs are interested. Requests for these workshops should be made to the director of CPS at 642-8651.

Career Planning

As a TA you have presumably already chosen your career. However, your students are likely to be confused about their own choices; some will be preoccupied with the question of what to do after graduation. Expect to be asked about jobs you have had and want to have, and perhaps to justify your choice of academia to curious undergraduates. However, it is not your job to counsel all your students into jobs that will fulfill all their hopes and dreams. Other offices on campus will do that.

Career Planning and Placement Center

The Center provides students and alumni with assistance in defining their career objectives. It teaches students job-search skills to assist them in finding employment consistent with their career objectives. The Center also provides extensive on-campus interviewing opportunities for students seeking both summer and permanent employment; and lists opportunities for full-time, part-time, summer and casual employment, as well as internships.

Advisers are available by appointment to assist students and alumni with any aspect of the career planning and placement process.

Workshops and programs are conducted throughout the year on a variety of career development topics. Examples include "Career/Life Planning," "Managing Your Job Search," "Resume Writing," "Interviewing," and "Summer Jobs."

The Career Library (Building T-6, second floor) provides many valuable reference materials including occupational information, job market studies, directories of employers, and past job listings.

Individuals considering careers in business, industry, government, social services, and nonprofit organizations should go to Building T-6, 111 Wheeler Hall, or 26 Barrows Hall.

Individuals considering careers in education should go to the ground floor of Building T-6.

Students, and their spouses, seeking part-time, temporary, odd-job, internship, or summer employment should go to the office in 111 Wheeler Hall.

Students eligible for work study should go to the Office of Financial Aid, 207 Sproul Hall.

The Counseling Center (Building T-5, 642-

2366) also offers both individual and group counseling on vocational and career issues, and can administer standardized tests of interest, aptitude, and personality characteristics. The Center's library is open to all students, and includes occupational and educational materials in addition to catalogues of colleges and professional and technical schools.

Applications to Graduate and Professional Schools

The Office of Student Advising—PreProfessional/PreGraduate (2224 Piedmont Ave., 642-5207) advises students about academic requirements for graduate and professional schools and provides assistance for students applying to graduate, business, dental, law, medical, technical or veterinary school. Services include:

- informational handouts about academic requirements and applications, audio and videotapes on graduate and professional programs at specific schools, and special informational workshops and programs
- a library of catalogs, guides and other reference materials on graduate and professional schools
- a letter of evaluation service through which letters from faculty and employers are stored, reproduced and sent to schools (An advance deposit—currently $15—is required from U.C. students and alumni who wish to open and maintain a letter file. All letters from instructors and employers must be written on the forms provided by this office. Suggested guidelines for letter writers are available upon request.)
- coordination of the recruiting and interviewing visits of graduate and professional school representatives, and
- special programs designed to increase participation of underrepresented minority and women students in graduate programs. The office also provides assistance and services to U.C. Berkeley academic departments seeking increased minority enrollment in the graduate programs.

Academic Assistance and Tutoring

Once in a while you may encounter a student whose academic problems are so severe that he or she needs far more help than you can give. Don't panic: no one expects you to make up for a student's lack of adequate instruction during twelve years in school. However, you may want to see that such students get help. The Student Learning Center is one of the best places to send them.

The Student Learning Center is an especially valuable resource for TAs and their students; it offers group and individual tutoring in specific courses, especially lower-division science, math, social science, and composition courses. The Center also offers extensive training for tutors in all subject areas. The Center is divided into two components: Building T-8 (642-7332) houses the science and math tutoring, while the Golden Bear Building on Sproul Plaza (642-0982) houses social science, English as a second language, and composition.

Although group tutoring is open to all students, the demand for individual tutoring in writing has increased so rapidly in recent years that the Center has been forced to create a complicated priority system. Students in Subject A or who are on academic probation have priority for tutoring, and few tutors have time for anyone else. Students who are classified as EOP/AA also have priority. Because it is in such high demand, the Student Learning Center cannot act as a cure-all for academic problems. However, it does offer a wide range of services and always manages to find someone who can help a truly desperate student. The Center can also assist in preparation for graduate or professional school examinations (MCAT, GRE, CBEST).

The ASUC

The Associated Students of the University of California (ASUC, 642-1431) is the official organization for student government on the U.C. Berkeley campus. All graduate students, as well as undergraduates, are eligible to vote in ASUC elections. The student government is divided into three branches: the Judicial Committee, the Senate, and the Executive Officers. All are located on the second floor of Eshleman Hall.

The Academic Affairs Office of the ASUC researches academic issues of concern to Berkeley students and maintains contact with the administration and faculty regarding student opinions on academic policy issues such as grading, tenure, and admissions.

ASUC programs to promote instructional improvement include a mini-grant program which provides funds for student-initiated projects designed to improve the quality of undergraduate education. Deadlines for these grants will be announced in *The Daily Californian* early in the fall semester.

ASUC Buddy Programs encourage the orientation of first-year undergraduates by matching incoming students with upperclass students. The Buddy Program operates year-round.

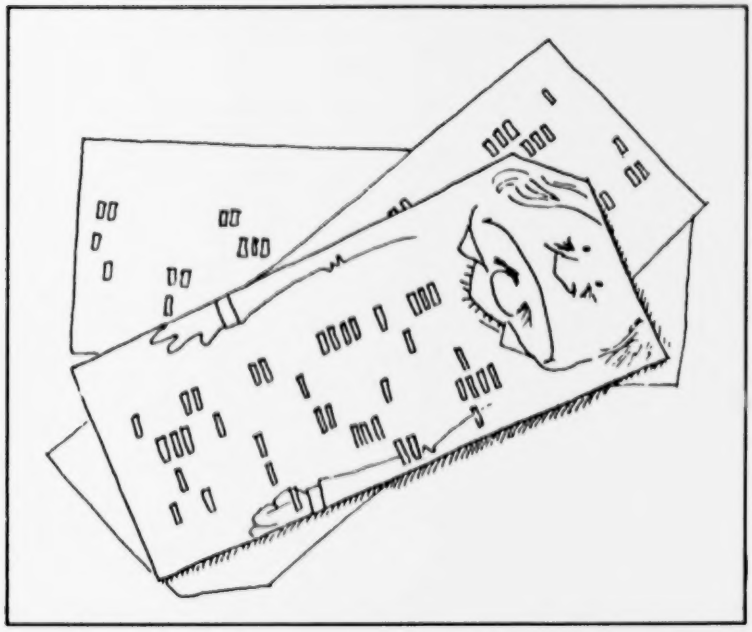
Student Activities and Services (SAS, 102

Sproul, 642-5171) is concerned with student life and can provide students with acclimation and activity information. SAS offers: CalSO orientations for new students; the Help Center (Student Union, 642-3911) during the first two weeks of the semester to provide assistance with class enrollment; *Resource*, the student handbook; Legal Assistance (Mon-Wed, 642-4980); and Student Conduct Information. The office registers and acts as a resource for 250 student groups and 60 U.C. sponsored Greek groups as well as administering: Student Musical Activities (Band, Jazz and Vocal, 53 Dining Commons), the Spirit groups, Committee on Literary Publications, Commuter Students Program, Immigrant Students Project, the Leadership Development Program, ASUC Liaison, and Residential Life.

The TA and the Rules

Plagiarism is as difficult to deal with here as it is everywhere. Broaching the subject to a student who has already completed a paper or exam is viewed as tantamount to an accusation, and everyone's feelings are sensitive on this point.

Before papers and projects are due, explain to your students what plagiarism is, and that the



University's rules require disciplinary action against plagiarism. If you think a student has plagiarized, ask the student to meet with you and to explain the paper or project aloud. Try to find the original source before confronting the student: an unsubstantiated accusation can get you in hot water, so confront but don't accuse unless you have proof. If you suspect that a student has plagiarized or cheated but don't have proof, discuss the problem with other TAs and the professor in charge. One of them may recognize the source.

Disciplinary Problems

Students at U.C. Berkeley are subject to University discipline for "dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the University." A complete statement of the standard of conduct expected of students can be found in the *University of California Policies Applying to Campus Activities, Organizations, and Students* (Revised, October 31, 1983).

A TA should discuss suspected cases of academic dishonesty with the faculty member responsible for the course. Since the faculty member is ultimately responsible for student grades, she or he is also responsible for initiating action concerning violations of standards of academic honesty.

The Office of Student Activities and Services (SAS), 102 Sproul Hall, 642-6770 or 642-6740, is responsible for administering University and Campus regulations in all areas of student misconduct, including matters involving academic dishonesty. TAs and faculty can refer any cases of suspected dishonesty directly for investigation by SAS or refer cases only after the student has been confronted by the TA and/or faculty member. After investigating allegations of academic dishonesty, the Office may refer the matter to the Chancellor's office for review and imposition of sanctions, if appropriate. SAS also keeps files of previous disciplinary cases, and those students who continue to engage in violations of University of California Campus Regulations will be subjected to more severe penalties.

SAS is a valuable resource for TAs who are confronted by disciplinary problems, and all matters of academic dishonesty should be referred to SAS.

Academic Complaints

If students complain to you about unfair grades, explain the procedure for appealing grades to them as clearly as possible.

If a student is not satisfied with the disposition of a complaint of an academic nature, she or he should take the complaint to the Ombudsperson for Student Academic Affairs (328 Stephens Hall, 642-5754) or the ASUC Student Advocate (318 Eshleman Hall, 642-6912). The Ombudsperson for Student Academic Affairs is a tenured faculty member who will investigate the facts of the case, advise the student, and/or mediate the grievance. The Student Advocate's role is to represent the student in hearings or other mediation processes. Acting as both formal and informal counsel, the Student Advocate can investigate complaints by calling the department in question and also by using the Advocate's reference files of case histories which date back to 1977.

Academic Procedures: Confidentiality of Student Records

Since TAs may deal with student records, they should be familiar with policy guidelines which protect access to those records. According to the *University of California Policies Applying to the Disclosure of Information from Student Records*, the confidentiality of student records is protected by state and federal law as well as by campus policy. Release of student records to third parties is very limited and, in most cases, requires the written consent of the student. Students are entitled to access to their records with narrowly defined exceptions. They are also entitled to challenge the content of their records. A copy of the Chancellor's policy on student records can be obtained from your department office.

Procedures for Student Withdrawal

Students who have submitted registration forms and fees for any semester to the Office of Admissions and Records may request cancellation of their registration prior to the first day of instruction. Beginning with the first day of instruction, students must request a formal withdrawal from the University rather than a cancellation of registration. A $10 service charge will be deducted from the student's refund of registration fee. From the first day of instruction, refunds are prorated according to the date withdrawal is approved. All students who cancel or withdraw *must* attach their registration cards to the petitions. Refund checks are mailed approximately six weeks after approval of cancellation or withdrawal. Petitions for cancellation or withdrawal may be obtained in 120 Sproul Hall.

A student who is experiencing personal problems or difficulties with academic work may not stop attending classes without formally withdrawing from the University. According to University regulations, a student is held responsible for completing the classes on her or his study list until such time as she or he files a Notice of Withdrawal signed by the dean of the student's college, if an undergraduate. Graduate students must obtain the signature of their adviser and the Dean of the Graduate Division. Failure to file a notice of withdrawal will result in students' receiving the grade of F in courses in which they are enrolled and possibly other academic sanctions as well.

As a TA, you are likely to have more contact with undergraduates than do other University personnel, and you should be able to advise them on the University policy regarding withdrawal. A student should follow the steps listed below in order to withdraw:

- Obtain a Notice of Withdrawal petition from 120 Sproul Hall.
- Obtain the signature of the dean of the college or school concerned. Other signatures may be required in specific cases. Refer to the *Withdrawal Petition* or *Resource* (student handbook) for further information.
- Return completed *Notice of Withdrawal* petition and registration card to 120 Sproul Hall.

If students have further questions, refer them to the dean's office of their college, school, or to the Office of Admission and Records.

Resources to Improve Your Teaching

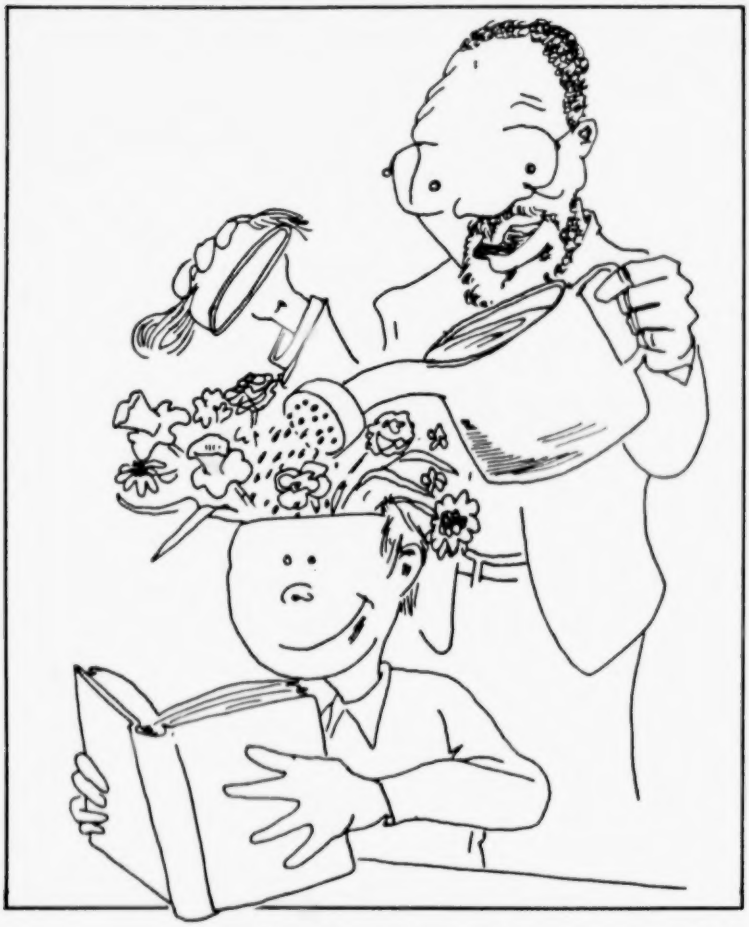
Graduate Assembly TA Training Project

Since 1976, the Graduate Assembly TA Training Project has served as one of the primary resource centers for Berkeley's TAs. One of the major premises behind the project is that graduate students should play a major role in developing and administering programs to improve graduate student teaching. The Training Project provides information and assistance on all aspects of TA training, hiring, teacher-student relations, and campus resources that provide instructional support.

One of the major efforts of the Project has been the development and implementation of a campuswide TA Training Conference held immediately before the beginning of each school year. It includes workshops conducted by experienced TAs on acquiring and improving teaching skills in a wide variety of disciplines. The Project is also responsible for developing this TA training handbook which is published periodically to provide information about campuswide and departmental TA training activities. Graduate students or faculty members who are interested in developing TA training programs in their own departments can contact the TA Training Project staff at the Graduate Assembly, Anthony Hall (642-2175).

Office of Educational Development

The Office of Educational Development (OED, 273 Stephens Hall, 642-6392) provides a variety of services and resources to help improve teaching and learning.



OED can help TAs design instruments and procedures for the evaluation of their courses and can provide information on aspects of teaching such as leading discussions, giving lectures, and testing and grading.

A number of publications are produced by the office. A newsletter, *Teaching at Berkeley*, is published once a year and explores topics in teaching. Recent issues have focused on: teaching with technology, engaging undergraduates in research, incorporating field experiences into course work, and teaching first- and second-year students.

Tip sheets such as "Good Practices in TA Training" and "Getting Feedback on Your Teaching" may also be of interest to TAs.

The staff is available to make presentations to TAs on aspects of teaching and evaluation and to consult with instructors on ways to improve their evaluation procedures, teaching effectiveness, courses and curricula or TA training activities.

As part of special projects to improve teaching and learning, the office sponsors special seminars, conducts evaluation studies, and designs, administers and analyzes surveys of departments.

OED also administers several grants and awards programs of interest to graduate student instructors, including CED Instructional Improvement Grants, COT Mini-grants, TA training grants and COT Outstanding Teaching Assistant Awards.

CED Instructional Improvement Grants

The Council on Educational Development (CED) provides instructional improvement grants, ranging from one thousand to several thousand dollars, which are typically used to prepare new courses, plan and improve departmental curricula, and test and develop new modes of instruction. The Council accepts proposals aimed at any aspect or level of instruction and especially encourages applications directed toward the following campus priorities:

- revising lower-division curricula
- responding to student diversity
- relieving overapplied courses and majors
- integrating ways to teach such skills as critical thinking, writing, problem-solving computer competency in undergraduate courses
- devising interdepartmental curricula around issues and themes of mutual interest.

U.C. Berkeley faculty members and students in partnership with faculty are eligible to apply.

Applications are judged by the Academic Senate Council on Educational Development, composed of twelve faculty members and students. Criteria for judging applications include quality and thoroughness of proposal, problems or needs addressed, numbers of students affected, expected impact on students'

learning, estimated per-student cost, and likelihood of departmental adoption with regular funding.

Applicants must complete a special proposal form. Proposals are reviewed twice a year, in the fall and in the spring. Deadlines for 1985-86 are October 18, 1985 and March 21, 1986. Guidelines, application forms and assistance in preparing proposals are available from the Office of Educational Development, 273 Stephens Hall (642-6392).

COT Mini-grants

The Committee on Teaching (COT) provides relatively rapid access to modest funding through its mini-grant program. Available to faculty members and graduate students in partnership with faculty, these grants are limited to $1,000 or less. The Committee welcomes proposals that focus on any aspect or level of instruction, and especially encourages those aimed at:

- improving existing courses
- developing new courses
- evaluating instruction
- assessing curricular needs
- strengthening students' skills
- experimenting with innovative modes of instruction.

Proposals are reviewed twice a year, in the fall and in the spring, by the Committee on Teaching, composed of seven faculty members and students. The deadlines for the 1984-85 are October 18, 1985 and March 21, 1986. Out of phase proposals (for a maximum of $300) are accepted for emergency or urgent requests.

Criteria for judging include clarity and specificity of the proposal, importance of problems or needs addressed, potential long-term influence on curriculum or courses, likelihood of adoption or continuation without additional grant support, and project originality and innovation.

Guidelines, application forms and assistance in preparing proposals are available from the staff of the Office of Educational Development, 273 Stephens Hall (642-6392).

Disabled Students' Program

There are many types of visible and invisible disabilities, and students are the best source of information about how much—if any—and what kind of accomodations are needed. The best resource for TAs is the Disabled Students' Program (DSP) at 642-0518. Handouts are available for teaching assistants which describe in detail major categories of disabilities (visual, hearing, orthopedic, learning, speech) and how they can best be accommodated in the classroom. DSP also has a number of counselors who specialize in various disabilities. They are available to talk with TAs who need help or advice in dealing with disabled students or to work with TAs and their students.

Library Instructional Support Services

Tours: The Main Library and Moffitt Undergraduate Library offer general orientation tours for students and faculty. All campus libraries offer library tours that can be tailored to meet the special needs of your students. To arrange for such a tour, TAs should call the library they wish to visit as far in advance as possible. In addition to guided library tours, Moffitt Library offers a self-paced audiotaped tour. Students should request these tour materials from Moffitt's Closed Reserve Desk.

Orientation Leaflets: The library publishes over 60 orientation leaflets. These leaflets are available at the Main Library Reference Desk and Moffitt's Reference Desk.

Term Paper Advisory Service: Undergraduates writing term papers involving library research may sign up at the Moffitt Library Reference Desk for an individual conference with one of the librarians. The librarian prepares an outline of the library research process (reference books, catalogs, subject headings, periodical indexes, etc.) and the resources available both in Moffitt and in other campus libraries, then takes the student through it step-by-step. Over 200 students take advantage of the service each semester, the majority of them juniors and seniors.

Course-Related Library Presentations: Instructors who plan to have students use the libraries for an assignment or term paper may arrange to have one of the Moffitt librarians give a lecture/presentation to their classes, introducing students to the resources available in the libraries and how to find them. The lecture may be in the library or in your classroom. Moffitt librarians will also work with instructors in devising library assignments, to help ensure that they work out as smoothly as possible. Call the Library Instruction Librarian for further information.

Audio-visual Services for Teaching

Education Media and Computer Services: Education Media and Computer Services (1650 Tolman, 642-8420) offers a Self-Instructional Audio-Visual Laboratory in which TAs may learn to operate the most common pieces of audio-visual equipment. Included in the lab are: an overhead projector, a carousel slide

projector, a 16mm motion picture, a phonograph, tape recorders, a sound-sync filmstrip projector, a portable videotape ensemble, and a Super 8 film splicer.

Contact Isabel Revoir at 642-8420 for more information or consultation about using media in your teaching.

Educational Television and Radio Office: Assistance in the development of instructional materials using media is offered at all stages of planning, production, post-production and broadcast by the Educational Television and Radio Office (9 Dwinelle, 642-2535). The Office also maintains a library of educational programs on videotape produced at U.C. Berkeley and other campuses available for loan. ETR has acquired a 3.8 meter satellite dish that is capable of receiving programs carried on 14 domestic and Canadian satellites. A weekly cable TV program produced by ETR, featuring faculty and student productions, is carried on 24 major cable systems throughout California.

In general, staff, equipment, and facilities assigned to ETR for providing service to the regular instructional programs on this campus are free of charge during normal working hours. However, costs for tape stock and other materials required for a specific program will be re-charged to individual department of project budgets. An estimate of these costs will be provided based on the production requirements for a specific project. Staff and facilities are available for planning and implementing TA training programs using videotape feedback techniques.

Computer Facilities

Graduate students who want to use computers for instructional or course work should first check with their departments; some departments have facilities available.

Tolman Microcomputer Facility: The Tolman Microcomputer Facility is located in 1535 Tolman Hall (642-2251). There are 40 Macintoshes and 20 IBM PCs available to U.C. Berkeley students. The facility is open Mon-Thurs. 8am-9pm, Fri. 8am-6pm, and weekends 1pm-5pm.

Hours are subject to change. In order to use the computers at night or on weekends, you must buy a card from the cashier's office in Sproul Hall; cost is approximately $6 for 6 hours. Standard software for both Macintoshes and IBM PCs is available or you may bring you own. Tolman tends to be heavily scheduled with computer classes during the middle of the day, and you may be asked to give up your machine if it is needed for a large class.

Instructional Technology Center: ITC is located in 211 Wheeler; hours are Mon-Fri. 11am-5pm, subject to change. This facility is smaller but less heavily scheduled; it also has more printers available for IBM PCs.

The TA as Graduate Student

TAs are graduate students as well as teachers and employees. Like undergraduates, many TAs are new to Berkeley, and Berkeley can be a very confusing place to study. There are many resources on campus that can make your life as a graduate student easier, more enjoyable, and more affordable; this section will acquaint you with some of the most important.

Graduate Assembly

The Graduate Assembly (GA) is the Graduate branch of Berkeley's student government. It is located in Anthony Hall (Pelican Building, 642-2175).

Many graduate students view student government as the domain of undergraduates and consequently display little interest in campus politics. Often, this view is not based upon apathy but on the understanding that the pursuit of one's research must be the top priority. We at the GA feel that it is possible for graduate students to make a contribution to the Assembly without sacrificing their academic goals. We encourage you to become involved in the GA or in the organizations in your department and help towards improving the quality of graduate student life on campus.

The following programs are those undertaken by the Graduate Assembly in the area of educational improvement.

Graduate Assembly Bulletin

The Graduate Assembly *Bulletin* serves to inform the graduate community of University policies, Graduate Assembly news, job, grant and scholarship opportunities, and events and issues of particular interest to graduate students.

The Graduate Assembly funds graduate groups for short-term activities and events and long-range organizational development. The two funding sources are Graduate Events

Funding and Projects and Services Funding. Applications and detailed instructions and guidelines are available at the Graduate Assembly offices in Anthony Hall.

Educational Improvement Grant Program (EIGP)

EIGP is a project that provides support for innovative approaches to improving graduate education. EIGP is funded by an allocation from the Council on Educational Development (CED) in recognition of the need for graduate students to have a major role in improving graduate programs and the departmental environments in which they work. Proposals requesting up to $900 are considered by EIGP.

EIGP holds three funding rounds a year: in July, September and January/February. Deadline dates will be announced in *The Daily Californian* and flyers will be sent to all departments' graduate secretaries for posting. EIGP applications can be obtained at the Graduate Assembly, Anthony Hall (642-2175).

Examples of previous projects funded by EIGP are:

- Cultural Rights and Native Scholarship Conference
- Migration & Resettlement Studies Center
- History of Free Speech Movement
- Women's Leadership Conference
- Issues in World Hunger Course

Graduate students interested in applying for fellowships, grants, etc. may utilize the EIGP library, which contains extensive information on funding sources. A Graduate Assembly staff person is available for your assistance in the search for funding sources.

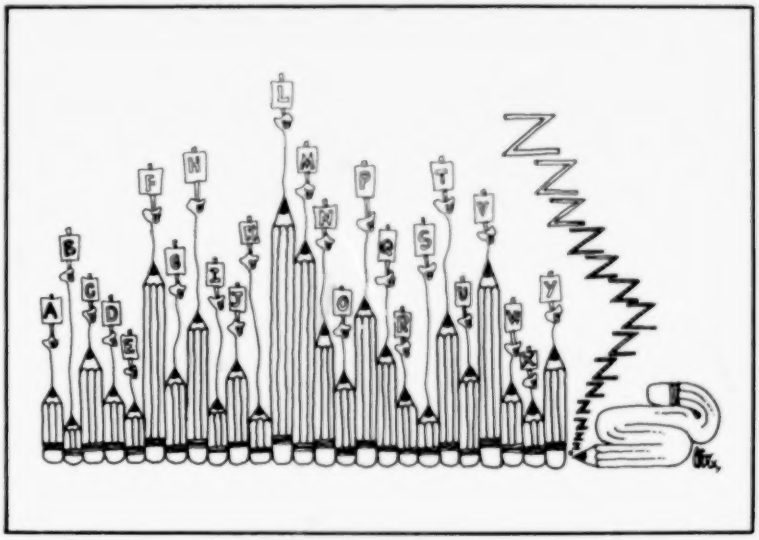
Graduate Minority Students' Project

The Graduate Minority Students' Project, housed at the Graduate Assembly, serves as a support system, a resource, a network, and an advocate for graduate minority students on the Berkeley campus.

The Project assists individual students and various graduate minority student organizations through such services as counseling, drop-in appointments, and sponsorship of academic symposiums, cultural activities, and social gathering. Serving as a useful resource guide, *Diversity and Excellence: A Graduate Minority Students' Handbook* includes information on the Graduate Division, the Office of Financial Aid, the Graduate Minority Program, and the Counseling Center, as well as various student organizations and community cultural centers in the Bay Area. The Project maintains communication with minority students through *The Net*, published monthly and sent to all graduate minority students. *The Net* advertises project events, campus programs, funding notices, fellowship information and deadlines, employment opportunities and news events.

The Project provides a voice for graduate minority students by communicating their concerns to Berkeley campus faculty members and administrators, and by representing graduate minority students' interests in campus and systemwide affirmative action committees.

This year's coordinator, Gloria Cuadraz, encourages all graduate minority students to participate in the Project's activities and affirmative action efforts. If any problems or questions arise throughout the course of your graduate education, the Project is there to be of service and assistance. Just call 642-2175, leave a message or drop by and visit the Graduate Assembly, Anthony Hall.



Graduate Women's Project

The Graduate Women's Project has been established to serve as a support system, a base for women's student organizations and an advocate for graduates on the Berkeley campus. Originally a part of the graduate Minorities and Women's Project, this separate project will now focus exclusively on women's particular needs and interests. During its first year, the project will have three main objectives: 1) to build a community among graduate women dispersed throughout the campus; 2) to support women's academic efforts by providing a forum for women's research and strengthening ties with women faculty, staff and undergraduates; and 3) to encourage the involvement of women in the political processes of the university through committee membership and lobbying.

The project will work toward these goals by providing information and referral to campus and community women's services; by establishing a network and serving as a base for women's groups on campus, at nearby schools and in the community; by sponsoring social gatherings, workshops and forums; by providing an arena for women's research; and by participating in the Women's Center Library's research network. The Graduate Women's Project will work with both the Women's Center and the Graduate Minorities Project in areas of shared concerns.

The Graduate Women's Project, in conjunction with the TA Training Project, will be coordinating a support group for women TAs. This group will meet regularly to discuss women's issues and problems, such as how to deal with sexism in student/TA relationships and how to handle sexual harassment.

If you would like to get involved with the project or have questions or suggestions, feel to contact: Lula Fragd, Graduate Women's Project Coordinator, at 642-2175.

Financial Aid Sources

Information on student financial aid can be obtained from the Financial Aid Office (201 Sproul Hall), from the Graduate Division Fellowship Office (1 California Hall), and from the Graduate Minority Program Office (1 California Hall). Teaching assistantships are coordinated with awards administered by the Office of Financial Aid, and appointment to a TA position could result in a decrease in a student's financial aid award (e.g. Grant-in-Aid, Fee Grant, National Direct Student Loan, work study). Consult with the financial aid officer (642-0485) if you foresee any problems in this area.

For the convenience of its students, the University provides two types of interest-free loans: Emergency Loans and University Loans. To qualify for an Emergency Loan, a student must be registered for the semester in which the loan application is made and must be up-to-date on other loan payments. Loans are granted up to a maximum of $250 per semester. A student may apply for the loan in 203 Sproul Hall; the process takes approximately 30 minutes. The Emergency Loan Desk is open Mon-Thurs. 9am-12:45pm.

To apply for a University loan, the applicant must be a continuing or registered student. Students may borrow $1500 per academic year. This loan may require one co-signer. The borrower must begin repayment within 30 days of the loan and must complete repayment within 12 months. (Exception: One time only, a student may borrow for the full amount of out-of-state tuition.) Applications are available at 210 Sproul Hall. Processing normally requires five working days. Read the loan instruction sheet carefully for complete details.

The Graduate Assembly maintains current information on fellowships available for graduate students, filed alphabetically and by subject. Ask for the fellowship file at Anthony Hall (642-2175).

Personal Stress

The Counseling Center (Building T-5, 642-2366) offers counseling groups designed to address common problems graduate students face. Topics include handling anxieties related to preparing for oral examinations, dissertation writing, and life in graduate school.

Academic Senate

The various committees of the Academic Senate provide many opportunities for interested students to participate. For further information about the committees and opportunities for student involvement, contact the Academic Senate (642-7211), the Graduate Assembly (642-2175), or the ASUC (642-0256).

These are the major instructionally related committees of the Berkeley Division of the Academic Senate, as described in the by-laws of the Berkeley Division:

Committee on Academic Freedom: Studies and reports on any condition which may affect the academic freedom of the University, including faculty, students, and employees. (Two student members)

Committee on Academic Planning: Confers with and makes recommendations to the Chancellor concerning the budget and budget policy of the Berkeley campus, including long range plans for the campus. (Two student members)

Admissions and Enrollment Committee: Considers and reports on matters involving admission and enrollment at Berkeley; for example, SAT and GRE standards. (Two student members)

Committee on Computing: Reviews faculty and student use of computing facilities and recommends ways to improve function of facilities to meet faculty and student needs. (Two student members)

Committee on Courses of Instruction: Reviews, coordinates and takes final action on all matters relating to courses of instruction, including approval of new courses, modification, withdrawal, and credit valuation of existing courses. (Three student members)

Council on Educational Development: Initiates, administers, and cooperates with exper-

imental courses and innovative development of courses or programs. (Three student members)

Committee on Educational Policy: Considers and reports on all matters involving educational policy, including changes in allocation of campus resources, establishment and disestablishment of colleges, schools and departments. (Three student members)

Committee on the Library: Advises Chancellor regarding the administration of the libraries and performs any other duties pertaining to the functioning of the library system. (Two student members)

Special Scholarships Committee: Devises and operates a number of programs to encourage and aid disadvantaged students to enter and succeed in work at the University, and increase their representation in the fields where they are underrepresented. (Two student members)

Committee on the Status of Women and Ethnic Minorities: Reviews the status of women and ethnic minorities on the Berkeley campus and reports to the Division on the progress of the campus in achieving equality of opportunity for these people. (Two student members)

Committee on Student Affairs: Consults with students and student organizations to enable the Division to consider student view, establish its own policies, and advise the Chancellor concerning the changing role of students in the affairs of the University. (Three student members)

Committee on Teaching: Stimulates and aids all departments in strengthening efforts to achieve good teaching, to conduct continuous study of all problems concerning the improvement of teaching in the University, and to reward good teaching on campus. (Two student members)

American History and Institutions: Determines what courses should be accepted as satisfactory in fulfillment of the AH & I requirement. (One student member)

Library Resources for Graduate Students

The libraries at Berkeley offer a number of special services which may be helpful to graduate students.

Seminars in Library Research Resources: TAs are welcome to enroll in the annual series of seminars for faculty: "Library Update: Faculty Seminars in Library Research Resources." The program of in-depth seminars is held every fall, usually in October, and covers how to find the literature in particular disciplines as well as developments in computer access to information and strategies in locating materials in the U.C. Berkeley library system. To receive the program announcement and enrollment form (mailed early each September), call Anne Lipow, Library Education Officer, at 642-8736.

Computer Searching: You may wish to use the library's computer reference services to learn what has been published on a given subject. The bibliographies generated in this way may be useful, for example, in compiling class reading lists which emphasize current journal literature. For further information on computer searches, call the General Reference Desk at 642-6657 (64-BOOKS) or one of the branch libraries.

Extended Bibliographic Service: An advisory service for students engaged in research in the social sciences or humanities. In scheduled meetings with library specialists, the researcher is guided to the sources of information on a topic. For details about this program, stop at the Main Library Reference Desk or call 642-6657.

Borrowing from Stanford: In addition to standard interlibrary borrowing privileges, also available to TAs is a service through which faculty and graduate students can borrow materials from the Stanford Library. An intercampus bus provides transportation between Stanford and Berkeley weekdays. Optionally, a "Fastbook" telephone number may be used to have Stanford books sent to Berkeley's Main Library Circulation Department. Apply for Stanford-Berkeley Libraries Cooperative Program privilege card at the Service Desk, second floor, Main Library Loan Hall.

Personal Safety

Emergency and Police Services: Police service is available 24 hours a day at the University Police Department, (Room 1, Sproul Hall).

These *emergency* numbers should be used to report any occurrence requiring immediate response, including fire and ambulance service. On-campus pay phones: 911 (no coin or prefix necessary); campus 642 phones: 9-911.

For non-emergency information, call 642-6760.

The Police Department offers a number of community-oriented services, including the following:

Escort Service: (642-WALK). The U.C. Police Department provides a walking escort service for students, faculty, and staff between campus buildings and/or local living groups within walking distances. The Escort Service is available Sun-Thurs from 7pm-2am.

Lost and Found: (642-4936). Open Mon-Fri 10am-4pm, located across the hall from Room 2, Sproul Hall.

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